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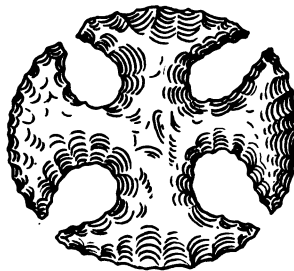
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ARCHAEOLOGICAL AND ETHNOLOGICAL PAPERS

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VOL. I, No. 6

PREHISTORIC BURIAL PLACES IN MAINE

BY

CHARLES C. WILLOUGHBY

Chief Assistant in the Peabody Museum

WITH FOUR PLATES AND FIFTY ILLUSTRATIONS IN THE TEXT
BY THE AUTHOR

CAMBRIDGE, MASS.
PEABODY MUSEUM OF AMERICAN
ARCHAEOLOGY AND ETHNOLOGY
1898

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11 June 1944

Salem Press:

THE SALEM PRESS CO., SALEM, MASS.

1898.

**This paper is published by the timely aid of
Clarence Bloomfield Moore
of the class of 1873
whose many contributions to the Peabody Museum
have exemplified his devotion to American
Archaeology and whose personal researches
have materially aided its advancement
J. W. Putnam**

EDITORIAL NOTE.

SEVERAL years ago, Dr. A. C. Hamlin of Bangor, Maine, kindly gave to the Curator of the Museum information of an interesting Indian burial place in Bucksport. In the summer of 1892, the opportunity occurred of securing the assistance of Mr. Willoughby, who is a Maine man and familiar with the region mentioned by Dr. Hamlin, to carry on for the Museum the exploration of this burial place and also of another at Orland.

The results of these explorations proved so interesting, and the work was so admirably carried out in accordance with the Museum methods, that it was decided to use the material from the Orland site to illustrate the "Methods of Archaeological Research by the Peabody Museum," in the Harvard University Exhibit at the World's Columbian Exposition in Chicago in 1893. The collection of specimens, as well as the photographs, sketches, field notes and a plaster model of the burial place at Orland, all by Mr. Willoughby, were exhibited in the Liberal Arts Building. The exhibit attracted favorable comment and was awarded a medal at the close of the Exposition. The Bucksport exhibit was made in the Department of Ethnology in the Anthropological Building.

In 1894, Mr. Willoughby explored other similar burial places in Maine, and the following paper gives an account of the two seasons' work. The illustrations are from drawings and photographs made by the author.

The specimens, together with several photographs of the graves, and models showing portions of two of the sites, are arranged in the Museum.

As the author has shown, these cemeteries are undoubtedly of very considerable antiquity; and it may be that they are of a people distinct from the historical Algonquins. The absence of pottery in and about the graves is a fact of ethnic importance, and one that should be borne in mind whenever burial places on the coast of Maine, and in New Brunswick and Nova Scotia, are explored.

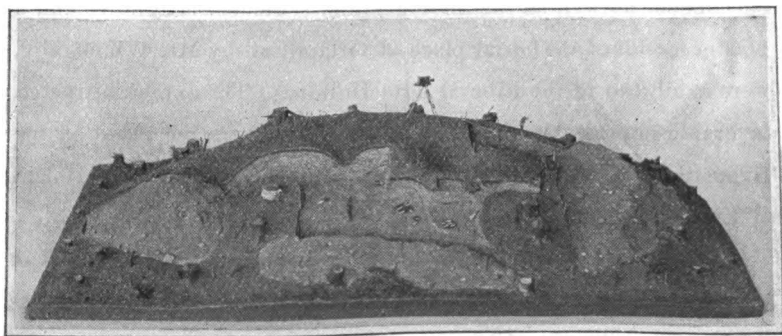
Mr. Willoughby offers a possible solution of the question, What people made these ancient cemeteries? But it is essential that a burial place in Newfoundland, the known country of the Beothuks, should be explored in order to provide the means of comparison with the burial customs of the prehistoric people on the coast of Maine.

F. W. PUTNAM,

Curator of Peabody Museum.

Cambridge, Mass.,

June 22, 1898.



Model of the Burial Place at Orland, Me., when partially explored, showing graves.

PREHISTORIC BURIAL PLACES IN MAINE.

IN the summers of 1892 and 1894 the writer had the good fortune to examine, under the auspices of the Peabody Museum, several burial sites in Maine. These graves proved to be of great antiquity and in several particulars unlike any heretofore described.

Two of these cemeteries had been dug over by collectors of relics, who obtained many implements of stone. Two others had been partially destroyed by the removal of gravel. The fifth was fortunately discovered intact.

The first of these burial places was in a gravel bank upon the western shore of a lake in the town of Damariscotta, Lincoln Co. It was discovered by a farmer while digging a fox from his burrow. The excavation revealed a stone implement lying upon a mass of red ochre. Further excavations showed the layer of ochre to be quite extensive, while other layers occurred at irregular intervals. About seventy-five gouges, celts, knives and pendants were found. These implements are now in the cabinet of the Maine Historical Society at Portland.

The second burial place was upon the northern slope of a gravel hill at the head of Frenchman's Bay, near Mt. Desert Ferry, Hancock Co. The gravel bank was partially removed preparatory to the construction of a railroad. Stone implements of a similar character to those already mentioned were found lying in red ochre. Several of these implements have been presented to the Peabody Museum by Mr. Alfred Johnson of Boston and Mr. H. L. Woodcock of Belfast, Maine. These localities were visited but no additional graves were found.

The three other burial places referred to will be described in detail. The evidence of their very considerable antiquity is con-

clusive; they are probably the oldest cemeteries known in the New England states.¹

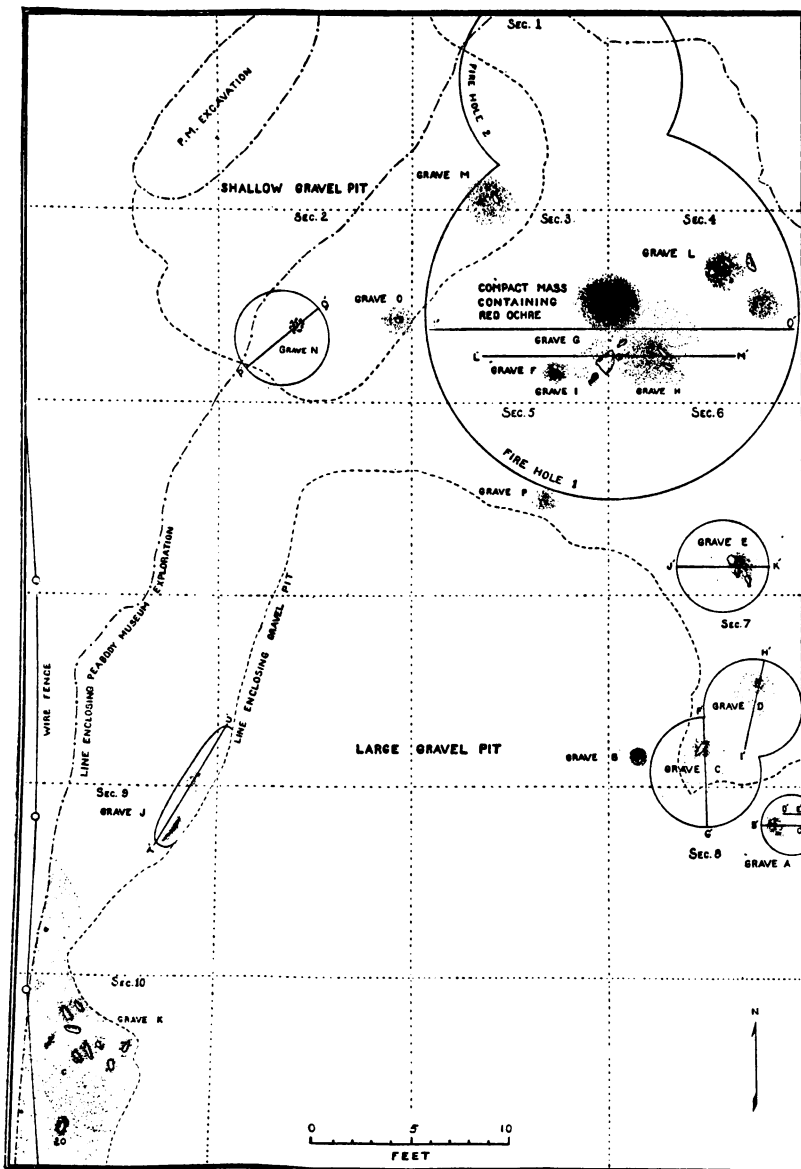
Fragments of an occipital bone, which had been preserved by contact with beads of native copper, were found in one grave. No implements or ochre were found in this grave, and it is probable that it was of more recent date than the others. In some of the other graves there was a small quantity of bone dust associated with the implements and the ochre.

BURIAL PLACE AT ELLSWORTH.

This cemetery is in Hancock County, about one mile below the village of Ellsworth, and is situated in a sand and gravel bank terminating in a high bluff which at this point forms the eastern bank of Union River. It was discovered while removing sand and gravel. Each grave had a deposit of red ochre in which the implements were found. The finding of these objects caused much local excitement, and a large area was dug over by citizens and many implements secured, including several long spear points made of compact slate. Many of these implements were presented to the Peabody Museum by Mr. G. S. Cook and Dr. W. M. Haines of Ellsworth and Mr. H. L. Woodcock of Belfast, who took them from the graves. An examination of the bank immediately surrounding the gravel pit revealed indications of undisturbed graves, and preparations were made for its systematic exploration. Mr. J. W. Coombs, the owner of the land, very kindly allowed excavations to be made, and gave assistance in many ways. Mr. John R. Swanton, a Harvard student, assisted in the exploration of this burial place and several workmen were employed.

The ground to be explored was staked off into sections ten feet square and each section was mapped to scale and numbered as shown in the plan, Plate I. Excavations were begun at the edge of the gravel pit in Sec. 8, the workmen throwing the earth behind them as they advanced, keeping a perpendicular wall of gravel in front. When a grave was encountered the objects within it were not disturbed until the earth covering them was carefully removed with trowel and small hand broom, photographs of the im-

¹ In several other localities in Maine, implements have been found under circumstances which render it probable that they were deposited in graves of this type and period. One man declared that he turned out ninety-nine implements within a space of a few square rods by "ploughing three furrows deep."



PLAN OF PREHISTORIC BURIAL PLACE, ELLSWORTH, MAINE.

THE SHADING WITHIN THE GRAVES INDICATES RED OCHRE, UPON OR WITHIN WHICH THE IMPLEMENTS WERE FOUND.

plements taken, and measurements made and recorded. The exact location of each implement was ascertained by the use of two tape lines. Using one side of the square section as a base line the measurements were made from the two corner stakes. The depth of the deposit below the surface was noted and the position of each implement further ascertained by means of a pocket compass.

Although included in the area of the gravel pit only a portion of the top soil had been removed from the northern half of Sec. 8. A trench was dug to a depth of over four feet near the southern portion of this section and gradually worked north. The wall of earth showed no traces of having ever been disturbed until the southern margin of Grave A was reached.

Nine inches from the surface a bed of white ashes, with a maximum thickness of three inches, was found, together with a few small fragments of charcoal (Fig. 1,

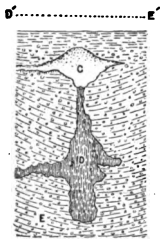


FIG. 2. Vertical cross section D'E', through a portion of Grave A, Ellsworth, Me. The dotted line indicates the surface of ground before formation of gravel pit. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within grave.

vertical cross section). The earth immediately below the ashes was of a dark brown color and very compact. Farther down the gravel assumed rich brown

and yellow shades. Four feet from the surface a mass of red ochre (indicated upon the plan by dotted shading) was discovered at the bottom of the grave. The outline of the grave could be traced, and its form is shown in the cross section through its centre. When the line of ochre appeared in the wall of sand and gravel the superincumbent earth was removed with a trowel and examined for human remains, but careful search revealed no indications of decayed bone. No implements were found with the ochre. Just north of the centre of the grave the bed of ashes became thicker, and a dark brown mass of earth with sharply defined edges and of the peculiar outline shown in the cross section, Fig. 2, was encountered.

In nearly all graves of this burial place dark earth masses shad-

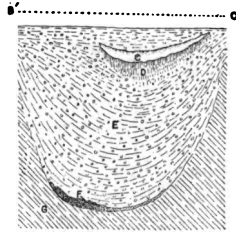


FIG. 1. Vertical cross section B'C', through Grave A, Ellsworth, Me. The dotted line indicates the surface of ground before formation of gravel pit. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within grave. F. Red ochre. G. Undisturbed gravel.

ing into rich browns and yellows were noted just beneath the ash beds. These masses varied greatly in form and size. This discoloration of the gravel was probably produced by the percolation of lye from the ashes.

Carrying the trench along the western side of Sec. 7, within the gravel pit, a mass of red ochre was unearthed twenty-six inches below the original surface, but only a few inches below the floor of the gravel pit. This ochre marks a grave (B), but as the greater portion of earth above the pigment had been removed, its outline could not be traced. A very small quantity of whitish powder, which proved to be bone dust, was found near the ochre.

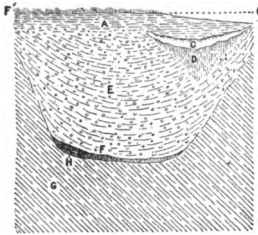


FIG. 3. Vertical cross section F', G', through Grave C, Ellsworth, Me. A. Top soil. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within grave. F. Red ochre. G. Undisturbed gravel. H. Chipped knife.

red ochre lay at the bottom of the grave, which was thirty-eight inches below the surface. Buried within this ochre was the chipped knife of felsite shown in Fig. 4. A greater part of the ochre had been placed in the northern side of the grave, and the mass measured thirty-two inches in length. No trace of bones was found.



FIG. 4. Chipped knife from Grave C, Ellsworth, Me. 4.

Just beyond Grave C, the wall of earth showed a thin line of ashes, nine and one-half inches below the surface, extending over Grave D and continuing northward several feet. A pocket of white ashes eighteen inches across and eight inches deep, of the form shown in Fig. 5, joined the thin layer over the centre of the grave. Below the ashes the disturbed earth within the grave was of various tints of brown and yellow. A mass of red ochre, forty inches from the surface, lay a little to one side of the centre at the bottom of the grave, together with a small quantity of yellowish earth mixed with bone dust, near which was a small, dark mass of earth evidently colored by the decom-

position of a human body. No implements were found in this grave.

Grave E, Sec. 6, forty inches in depth, was of the same general character as those previously described. The layer of ashes above extended beyond the limits of the grave and fragments of charcoal lay upon the upper surface of the ashes. The dark mass of cemented earth was of peculiar form and extended nearly to the bottom of the grave. Two grooved stone pendants and a decomposed firestone were surrounded by a quantity of red ochre which occupied the position shown in the vertical section, Fig. 6. The relative position of these objects will be seen by referring to Plate I. Only a cinder-like mass and yellow oxide of iron in powder remained of the firestone which was originally a nodule of iron pyrites.

During the explorations of these ancient burial places, several more or less decomposed firestones were

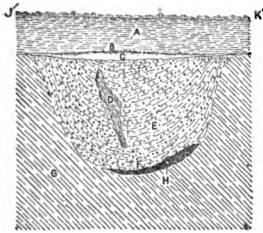


FIG. 6. Vertical cross section J', K', through Grave E, Ellsworth, Me. A. Top soil. B. Charcoal. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within grave. F. Red ochre. G. Undisturbed gravel. H. Pear-shaped pendant.

found. They occurred singly or in pairs. Occasionally a nodule of pyrites had been placed in the grave accompanied by a well-battered felsite hammerstone. Frequently a little mass of yellow oxide of iron in powder was all that remained of one of these ancient fire-making implements, and this is one of the evidences of the age of the burials.

The outline of the graves within the northern half of the cemetery could not be determined with certainty owing to the coarseness of the gravel. No difficulty was experienced, however, in obtaining accurate cross sections of the great fire hole or communal grave.

A mass of red ochre was found east of the centre of Sec. 5, forty-eight inches from the surface, which marked the bottom of Grave P. Except in a few places the disturbed earth above could

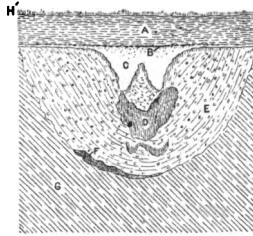


FIG. 5. Vertical cross section H', I', through Grave D, Ellsworth, Me. A. Top soil. B. Charcoal. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within grave. F. Red ochre. G. Undisturbed gravel.

not be distinguished from the surrounding gravel, and it was impossible to trace the outline of the grave.

North of Grave P were two circular depressions or "fire holes," the largest being about eighteen feet in diameter with a central depression of one foot. Excavations showed this to be a communal grave where several bodies had been buried. Each deposit of ochre within the fire hole probably marked the resting place of a body; and for convenience each is considered a separate grave, and is so designated upon the plan.

Ashes were encountered a few feet from the southern margin of the great depression; and as the work progressed all the characteristics of the graves already described were found to be present here upon a larger scale.

The deposit of ochre marking Grave F, Sec. 3, lay forty-one inches beneath the surface, together with a dark discoloration of the gravel and a small amount of whitish grains, which analysis showed to be decayed bone.

A short distance to the east, surrounded by a layer of red ochre, was an angular rock and near it, upon opposite sides, were two pear-shaped pendants with their grooved ends pointing to the southwest. A partially disintegrated firestone lay to the right of the rock. Judging by the appearance of the surrounding earth two or more bodies had been buried near this stone. A small quantity of bone dust was obtained from Grave G, but all traces of bone had disappeared from Grave I.

Grave H was three feet southeast of the centre of the fire hole. A pendant and a rude implement of slaty stone lay upon the point.

Vertical cross sections through this fire hole at L'-M' and N'-O' are shown in Figs. 7 and 8. Near the centre of the depression and three feet from the surface was found a mass of dark brown earth mixed with red ochre. This mass had a maximum diameter of three feet; it varied from three to eight inches in thickness, and was so hard that it was difficult to break even with a pick. Although examined with the greatest care no trace of bone visible to the eye was found. Chemical analysis, however, showed decayed bone to be present.

Two masses of red ochre were discovered fifty-three inches from the surface in the eastern half of Sec. 4 (Grave L). This grave may have been dug previous to the excavation of the fire hole. Its outline could not be traced, neither was it possible to determine

whether it contained one or two burials, although the indication seemed to be that two bodies had been deposited there. Near the ochre upon which the implements had been placed, a small quantity of bone dust was found, and close to the accompanying deposit of

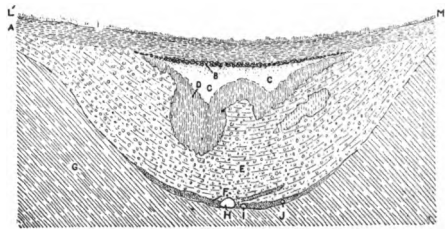


FIG. 7. Vertical cross section L',M', through Communal Grave or Fire Hole 1, Ellsworth, Me. A. Top soil. B. Charcoal. C. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within fire hole. F. Red ochre. G. Undisturbed gravel. H. Small boulder. I. Firestone. J. Rude stone implement.

paint lay masses of dark earth probably discolored by the decomposition of a human body. The ochre had been deposited in two masses, the larger being about one-half inch in thickness and eighteen inches in diameter.

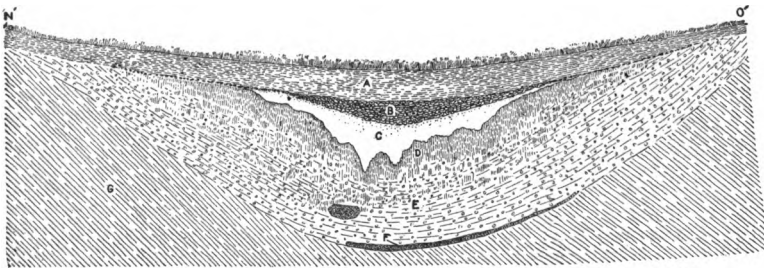


FIG. 8. Vertical cross section N',O', through Communal Grave or Fire Hole 1, Ellsworth, Me. A. Top soil. B. Charcoal. C. Ashes. D. Discoloration caused by lye from ashes. E. Disturbed gravel within fire hole. F. Red ochre. G. Undisturbed gravel. The dark mass, to the left of E, contained red ochre and bone dust.

Within this mass of paint were found a small rude scraper and a flake, both of felsite, and upon it lay a partially disintegrated firestone and the rudely engraved implement illustrated in Fig. 9.

This latter implement somewhat resembles the so-called "ulus" or slate knives which are not uncommon in New England. The cutting edge had been broken away and the implement had not been used for cutting purposes for some time previous to its deposit in the grave.

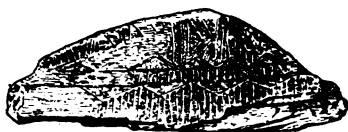


FIG. 9. Implement from Grave L, Ellsworth, Me. Orna-mented with a design in incised lines. $\frac{1}{4}$.

The side opposite to that shown in the drawing bears evidence of its use as a sharpening stone, and many of the incised lines upon it have been nearly obliterated. The design upon the side illustrated is well preserved, only a few of the lines having been ground away.

Near the northwestern edge of fire hole No. 1 a large mass of deep red ochre was unearthed, seventeen inches below the original surface, and upon it lay a well finished pendant (Plate II). A small disintegrated firestone was also discovered in the paint. No indications of human remains were found, nor could the outline of the grave be traced.

Fire hole No. 2 had been dug to the depth of twenty-eight inches. A cross section showed a mixture of earth, ashes and charcoal with occasionally small quantities of red ochre. It seemed that the earth had been disturbed quite recently, probably by workmen prospecting for gravel.

Grave O, twenty-four inches below the original surface, contained red ochre and the remains of a firestone. A discolored mass of earth three inches in thickness was found near the ochre, but there was no indication of bone. This grave and graves M and N were within the limits of a shallow gravel pit, and several inches of the earth above them had been removed.

Grave N, Section 2, contained neither ochre nor implements. As above noted this grave was within the limits of the small gravel pit, and the earth above it had been removed to a depth of from four to twelve inches. The original surface is indicated by the

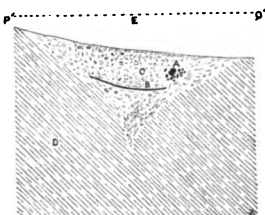


FIG. 10. Vertical cross section P', Q, through Grave N, Ellsworth, Me. A. Fragments of occipital bone, and beads of native copper. B. Fragments of birch bark. C. Disturbed gravel within grave. D. Undisturbed gravel. E. Surface of ground before formation of gravel pit.



GRAVE M, ELLSWORTH, MAINE,
SHOWING RED OCHRE AND PEAR-SHAPED PENDANT.

dotted line E in Fig. 10. The upper remaining portion of the grave contained ashes and a small quantity of charcoal mixed with the gravel. The charcoal and ashes were thickest near the centre of the grave. About nineteen inches from the surface and a little to one side of the centre were the crumbling fragments of a human occipital bone, and twenty-two beads made by rolling strips of native copper. A number of the beads lay in contact with the

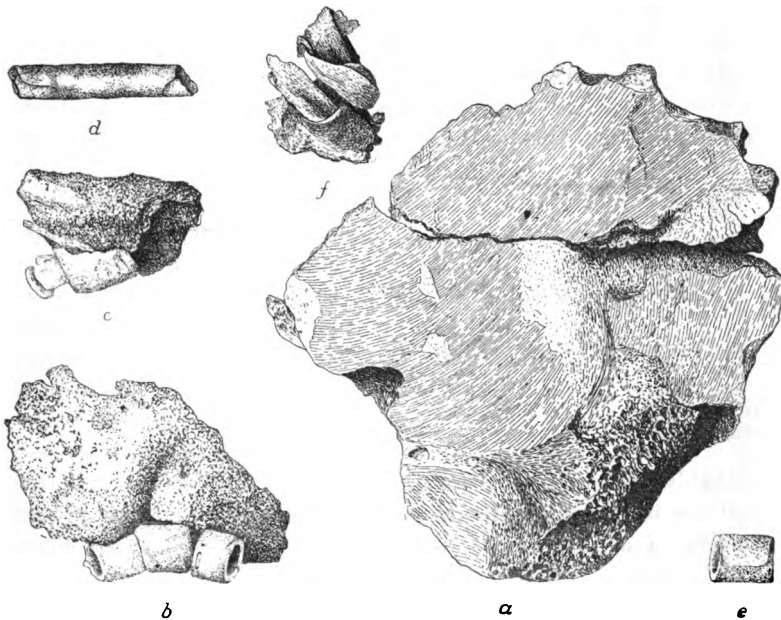


FIG. 11. Native copper beads and fragments of occipital bone from Grave N, Ellsworth, Me. *a* Fragments of occipital bone. *b*. Beads in contact with fragment of bone. *c*. Bead with piece of buckskin cord protruding, in contact with fragment of bone. *d*, *e*. Beads. *f*. Portion of buckskin cord upon which beads were strung, showing knot. †

bone. Typical forms of these beads with fragments of the buckskin thong upon which they were strung, and pieces of the occipital bone are illustrated in Fig. 11. The preservation of both bone and thong is due to the presence of copper salts. All other parts of the skull and skeleton had disappeared. On two or three pieces of charcoal was a cinder-like substance which may have been caused by the burning wood coming in contact with the body,

but there was no evidence of cremation. On the contrary, in all these burials care seemed to have been exercised to prevent the fire over the graves from reaching the bodies.

About two feet below the original surface was a layer of birch bark upon which the body had probably been placed. Fragments of this bark, two inches or more in length, are perfectly preserved and one or two pieces show contact with fire. It seems incredible that this bark should have outlasted the skeleton.¹ A careful search for the line of contact between the disturbed and undisturbed gravel failed to outline the grave. It was evident that the body had been placed at length and not, as was probably the case in the majority of burials in this cemetery, in a sitting posture. The gravel was discolored for several inches below the layer of

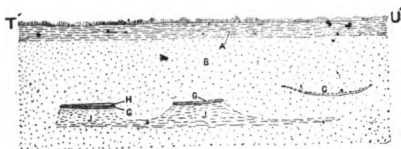


FIG. 12. Vertical cross section T', U', through Grave J, Ellsworth, Me. A. Topsoil. B. Sand. C. Ashes and charcoal. G, G. Red ochre. H. Slate spearpoint. J, J. Sand cemented into a compact mass.

bark, but it was impossible to tell whether the earth had been disturbed or merely discolored by the percolating lye from the ashes. It is to be regretted that the gravel had been removed from the upper portion of this grave as it also removed the greater portion of the ash bed which was

probably present just below the top soil. This burial had few features in common with the other graves in this cemetery, and may be of a later date. No implements or traces of red ochre were found.

The gravel immediately south of Grave N was coarse and contained a large amount of iron which had cemented it into a compact mass not easily broken with a pick.

Still farther to the south the gravel became finer and was finally replaced by sand in Sections 9 and 10. The exposed wall of sand at the western edge of the gravel pit showed no signs of stratification, neither were there any indications of its ever having been disturbed even within the limits of Grave J. As the wall of sand was gradually removed, a layer of red ochre was encountered twenty-one inches from the surface (at the left in vertical cross section, Fig. 12) and upon it lay the finely finished slate spear

¹ Professor Putnam found a large piece of birch bark in an Indian's grave in Winthrop, Mass., which must have been over two hundred years old.

point illustrated in Fig. 13. About a foot farther to the north (Fig. 12) lay another mass of ochre without implements. Still farther to the north and on a higher level were found ashes and bits of charcoal. The sand below the layers of ochre was somewhat discolored and portions of it were cemented into compact masses, evidently by the lime from the skeleton. No fragment of bone or particle of bone dust was found, nor could the line of demarcation between the disturbed and undisturbed sand be determined. South of Grave J an undulating line of light red ochre extended north and south for a distance of twelve feet, four inches, at an average depth of two feet below the surface, the maximum depth being thirty inches. The ochre varied in thickness from one-half inch to three inches. Small quantities of ashes and charcoal were encountered at an average depth of eight inches from the surface.

The implements illustrated in Fig. 14 were taken from various depths, each implement lying in a little mass of ochre of a darker shade than that forming the continuous line below. The relative position of the implements is shown upon the plan. (Plate I, Section 10.)

The first implement discovered in Grave K was the pendant illustrated in Fig. 14 *f* (the most easterly in the plan). This lay in a mass of ochre twelve inches from the surface. Two inches below this deposit was a disc-shaped discoloration of the sand five inches in diameter and three-quarters of an inch in thickness which was separated from the ochre above and below by a layer of pure sand. The sand was discolored and cemented in several places below the implements. South of the main deposit of implements a single pendant (No. 20) lay twenty-four inches beneath the surface in a mass of red ochre. As this relic may have been deposited in another grave, it is not included in the illustrations of objects from Grave K. Thirty inches from the surface and near the centre of the deposit lay the chipped knife, the pendant, and the sharpening stone illustrated in Fig. 14, *g*, *e* and *i*. The two celt-like blades *a* and *b* were twenty-eight inches below the surface. Six inches above and to the north of the smaller of these blades was found the pendant (*d*) with a much disintegrated surface. The other

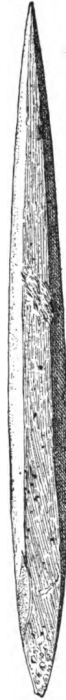


FIG. 13.
Polished
slate spear-
point.
Grave J,
Ellsworth,
Me. †

implements are a small chisel, probably once fitted to a handle of wood or antler (*h*) and a typical specimen of a felsite hammerstone (*j*) once forming a part of a fire-making set. Its companion, a lump of iron pyrites, had become entirely disintegrated, nothing remaining of it save a few particles of yellow oxide of iron which lay in the sand and adhered to the hammerstone. This hammerstone, like most of these implements obtained during the explorations, is skilfully fashioned to fit the fingers, only one side being used to strike the pyrites — the upper and right hand side as shown

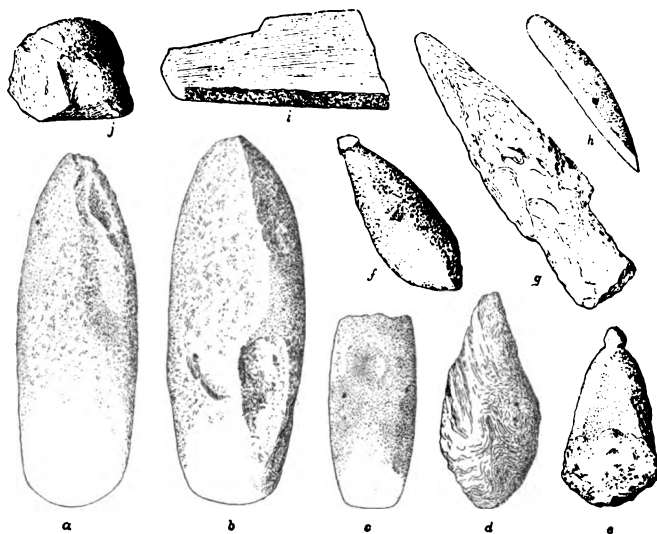


FIG. 11. Implements from Grave K, Ellsworth, Me. *a, b, c.* Celt-like blades. *d, e, f.* Pear-shaped pendants. *g.* Chipped knife. *h.* Small chisel-like implement. *i.* Polishing stone. *j.* Felsite hammerstone, part of a fire-making set. $\frac{1}{2}$.

in the drawing. The lower portions of the celt-like blades obtained from this grave are polished and the cutting edges are sharp and in perfect condition, while the upper portions are rudely finished and were probably inserted into sockets of wood or antler.

The material removed from the southern part of the large gravel pit previous to my explorations was principally sand. A number of graves were encountered during the removal of the sand and many implements were found.

The Peabody Museum is fortunate in receiving as a gift a large portion of these implements. They consist of eighteen celts, a

pear-shaped pendant, fourteen large chipped knives or spearpoints of which Fig. 15 is a good example, and sixteen finely polished and gracefully shaped lanceheads, typical forms of which are shown in Fig. 16. The majority of these lanceheads are of compact green slate, with cross section either lenticular, lozenge-shaped or octagonal. No reliable information could be obtained regarding their positions in the graves. It was said that they were found about two feet from the surface lying in red ochre. It is probable that their positions were not dissimilar to that of the specimen taken from Grave J. This lancehead had probably been fastened to a shaft and placed with the body lengthwise in the grave, the slate point evidently occupying a position near the head.

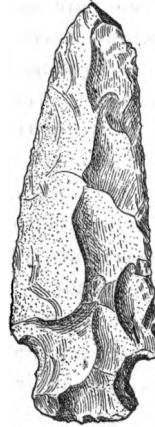


FIG. 15. Type specimen of chipped implements from graves in large gravel pit, Ellsworth, Me. †

Judging from the graves of which the outlines could be traced, there were three kinds of burials in this ancient cemetery. The first consisted of bowl-shaped cavities dug to a depth of from thirty-eight to fifty-three inches. Within the cavity the body was placed, probably in a flexed position and accompanied by various worldly possessions of the deceased. The grave was then filled with gravel and a fire kindled over it. The second type of burial was similar to this, the principal differences being in the size of the grave and the number of bodies deposited therein. The third type differed from the others in having the body placed at length in a shallow grave.

BURIAL PLACE AT BUCKSPORT.

Bucksport is eighteen miles below Bangor upon the eastern bank of the Penobscot river. The peninsula upon which the ancient cemetery is situated is locally known as Indian Point, and lies about a half mile above the village. The river widens just south of this point and forms a broad, shallow bay, bordered by a pebbly beach. Rising from this beach to a height of fifteen feet is a bluff. A few feet from its edge lies a gravel knoll, the site of the burial place. A greater part of this cemetery was free from the growth of sapling pines which covered the rest of the ridge.

In 1891 Mr. George Blodgett had occasion to remove gravel from the southern slope of the ridge. After a number of cart loads had been removed, one of the workmen noticed a well wrought stone implement embedded in the gravel. Continued excavations revealed other specimens lying in red ochre, and by searching along the road where the gravel had been placed for repairs several more were found.

North of the gravel pit a space about fifteen feet by fifty feet was subsequently dug over by residents of Bucksport in search of relics. The number of implements found could not be ascertained, but about forty were shown to the author.

An examination of the unwooded part of this knoll adjoining the gravel pit gave evidence of the presence of other graves, and preparations were accordingly made for a careful investigation of the undisturbed portion of the cemetery. The ground was staked off into sections twelve and one-half feet square, and a plan made. With the exception of F, all the sections in the plan (Plate III) contained burials. Other sections explored, but containing no burials, are not shown upon the plan.

To the south of the area included in the plan lay the gravel pit and the

ground dug over by residents in search of relics. To the west an outcrop of clay replaces the gravel. No burials were found in this clay. A thick growth of sapling pines covered the knoll to the

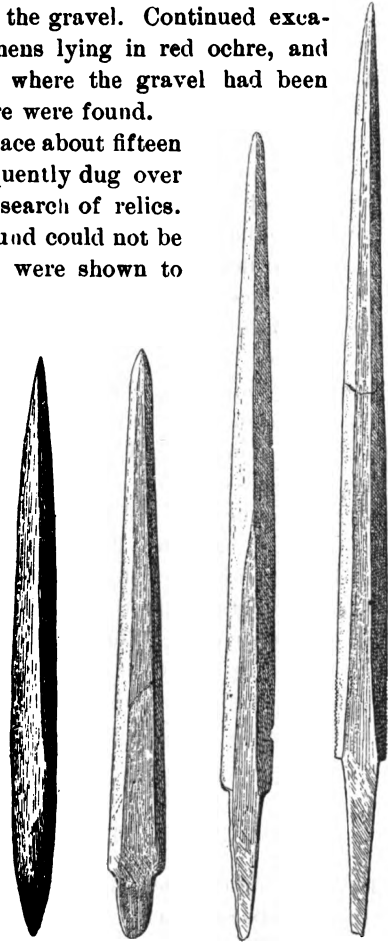
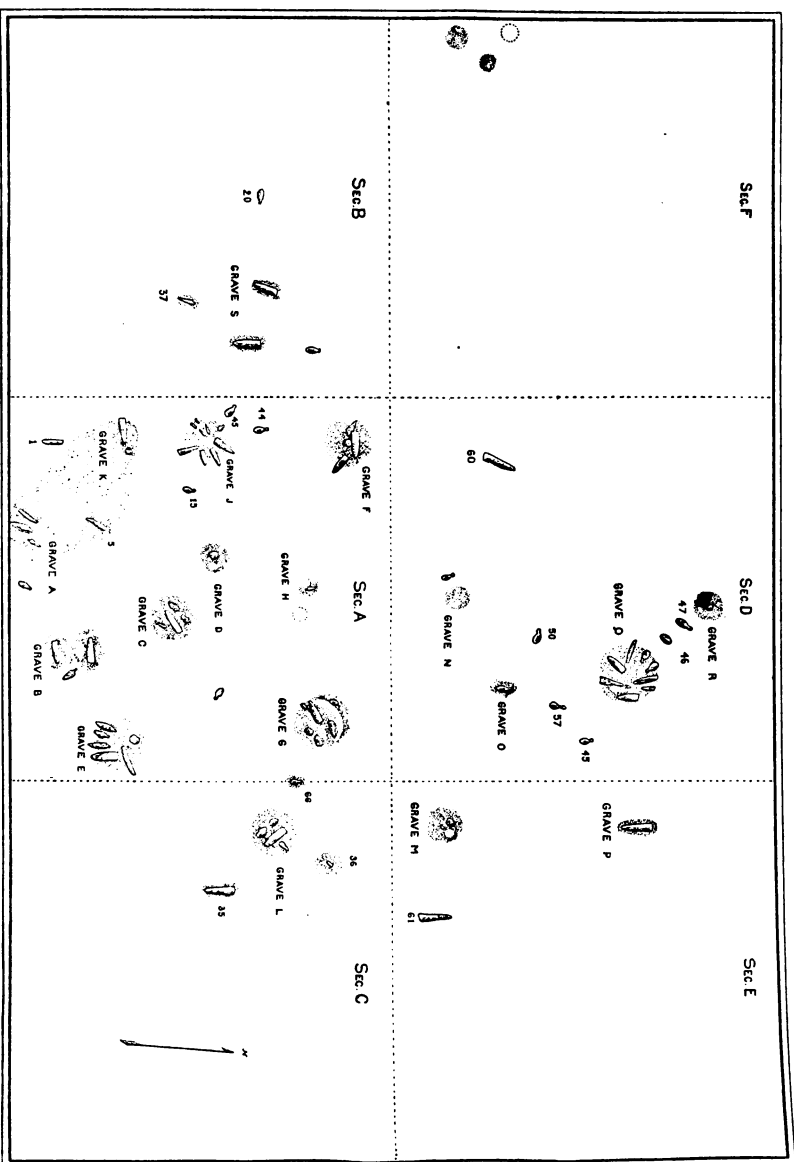


FIG. 16. Type specimens of polished slate spearpoints from graves in large gravel pit, Ellsworth, Me. †



PLAN OF PREHISTORIC BURIAL PLACE, BUCKSPORT, MAINE.

THE SHADING INDICATES RED OCHRE, UPON OR WITHIN WHICH MOST OF THE IMPLEMENTS WERE FOUND.

north and east. Not having permission to remove these trees this part was not explored.

The gravel was comparatively coarse and very compact, rendering necessary the use of a pick.

SECTION A.

Sinking a trench along the southern edge of the undisturbed gravel and working north, a line of ochre was disclosed twenty-four inches from the surface at the southern edge of Section A. The vertical bank of earth was examined with the utmost care to

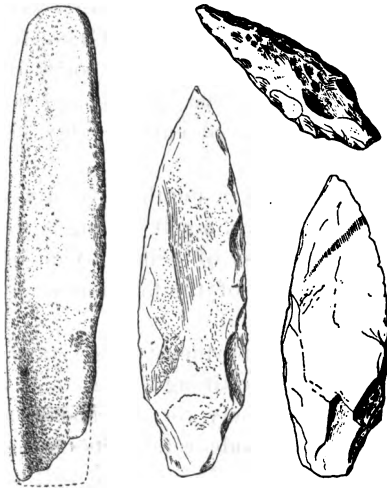


FIG. 17. Implements from Grave A, Section A, Bucksport, Me. †

ascertain the outline of the grave, but neither in this nor in any of the other graves could the outline be determined. This was probably due in great measure to the coarseness of the gravel. The graves were also so near to each other as to leave only a small amount of undisturbed earth within the area of the cemetery.

Removing the earth from above the deposit of ochre the group of implements, illustrated in Fig. 17, was brought to light. The relative positions of the implements are shown in the plan, Plate III, Section A, Grave A. The gouge at the left, in Fig. 17, shows

considerable weathering and has a broken edge. This implement was lying upon its side, the position in which it was probably deposited. Near the gouge were two large chipped knives of slate, lying one upon the other with their points towards the south. By the side of these implements was a smaller knife of felsite, with its point toward the north. A foot to the north of this group a gouge (No. 5) was unearthed lying upon its side in a little mass of ochre. About the same distance to the left, outside the ochre and six inches below its level, was a small gouge (No. 1), having a narrow cutting edge which had evidently been ground several times. Following the diminishing line of ochre, a rude celt eight inches in length was unearthed lying in a horizontal position, and near its upper end and standing upright was a short, well-made celt, with a sharp, slightly curved cutting edge. (Grave K.)

Grave B, Section A, contained two deposits of ochre, the first being eighteen inches below the surface and containing a short thick celt with a slightly curved cutting edge, similar to the one last described.

The second deposit lay at a depth of twenty-seven inches, and consisted of a mass of ochre, a celt having a weathered surface, a chipped knife, and a mass of yellow oxide of iron in powder which was all that remained of the firestone of iron pyrites originally placed in the grave.

A short distance to the northeast was Grave E, twenty-eight inches below the surface, containing the group of implements illustrated in Fig. 18. The finely formed and beautifully finished gouge *a*, which lay upon its side, retains its cutting edge in perfect condition. The groove extends not quite half the length of the tool, and is about one-quarter of an inch deep. This implement is polished for about one-fourth of its length above the cutting edge, and the remainder is finished by the process known as pecking, being the best example of this style of work which I have seen. This gouge, like many similar implements from these burial places, is made of a compact metamorphic igneous rock. The chisel-like tool of compact green slate illustrated in *b*, Fig. 18, is about a half inch in thickness with a nearly straight cutting edge. It has a perforation near the smaller end. By the side of this tool lay three rudely chipped knives of felsite, *c*, *d*, and *e*, with their points toward the south. They were probably once hafted in short

handles of wood or antler, and must have been very old when placed in the grave, as their surfaces in several places show polish by long use. The felsite of which these knives are made resembles very closely the body rock of Mt. Kineo, Moosehead Lake. While the material may have been obtained from some erratic boulder torn from the mother rock and deposited by glacial action, it is more likely to have been brought by the Indians from Mt. Kineo, since near the base of this mountain the author has discovered several ancient Indian workshops where felsite was extensively worked.

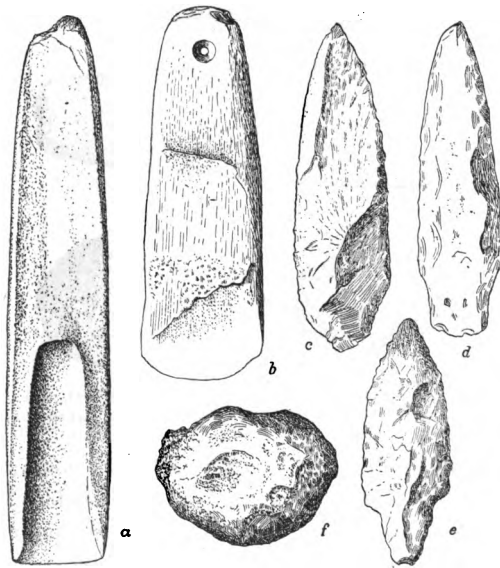


FIG. 18. Implements from Grave E, Section A, Bucksport, Me. *a*. Gouge. *b*. Perforated celt-like implement. *c*, *d*, *e*. Chipped knives. *f*. Firestone. $\frac{1}{2}$

The firestone, *f*, is one of the best preserved specimens obtained from these graves. Although somewhat disintegrated the surface exposed by a recent fracture shows unchanged crystals of pyrites. Its specific gravity is greater than any of the other firestones recovered, and it is the only example in which all or nearly all of the pyrites has not undergone chemical change.

Grave C, thirty-three inches below the surface, contained an unusually large amount of red ochre of exceptionally brilliant color.

Embedded in the paint were the implements illustrated in Fig. 19. These consist of a well-wrought celt, an elongated pebble with polished surface probably used as a paint pestle, and a fire-making set composed of a felsite hammerstone (shown at the left in the illustration), fashioned to fit the fingers of the right hand, with the battered surface upon one side, and a lump of limonite the result of the decomposition of a nodule of pyrites placed in the grave. A pear-shaped pendant without accompanying ochre lay about two feet from this deposit at a depth of five inches.

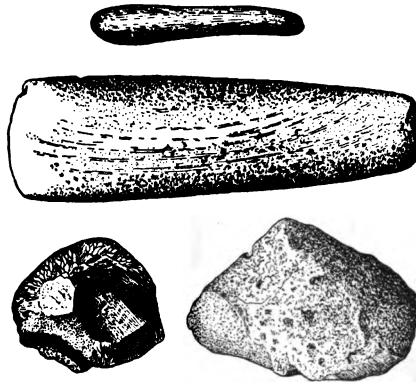


FIG. 19. Implements from Grave C, Section A, Bucksport, Me. An elongated pebble, probably a paint pestle, a celt-like blade and a fire-making set. $\frac{1}{4}$

Grave D, a short distance to the northwest, contained a small mass of red ochre eighteen inches from the surface. Upon the ochre had been placed two firestones. These implements were badly decomposed, all that remained of one being a small quantity of yellow powder (oxide of iron) while its companion had nearly disappeared, only a small crust-like substance covered with iron oxide remaining.

The implements illustrated in Fig. 20, together with the usual deposit of red ochre, were found in Grave J, Section A.

The great majority of objects taken from the graves were evidently found in nearly the same position in which they were deposited. In a few instances the implements had apparently been displaced by the decay of the body and the settling of the earth. This displacement was very apparent in Grave J. The objects

were lying at different angles and at depths varying from six to eighteen inches. The principal deposit of ochre was eighteen inches below the surface.

A gouge with a shallow groove, its surface being unpolished, is shown at *a*, while *b* shows the back or convex side of a celt-like blade of harder material than the preceding specimen. The edge

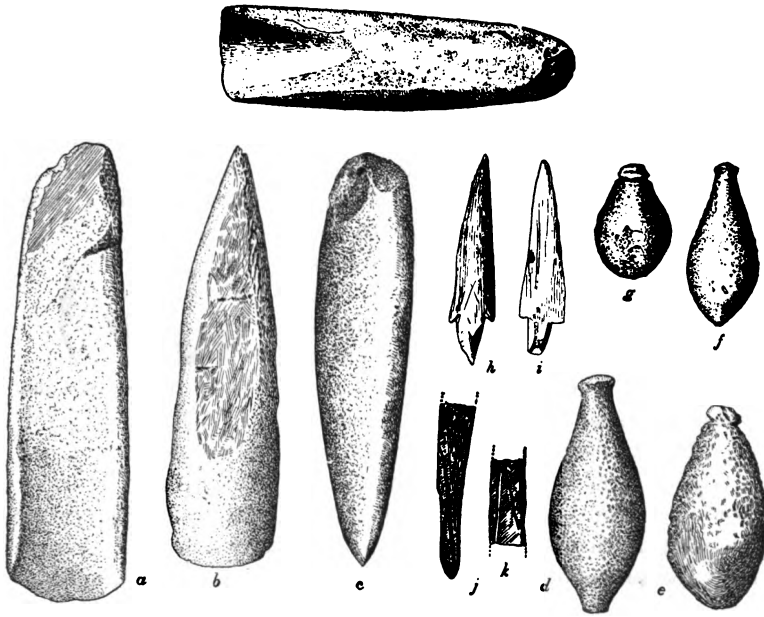


FIG. 20. Implements from Grave J, Section A, Bucksport, Me. The upper drawing and *a*, are gouges. *b*, *c*. Celts, or celt-like blades. *d*, *e*, *f*, *g*. Pendants. *h*, *i*. Polished slate arrowpoints. *j*, *k*. Fragments of a small slate implement ornamented with incised lines. *l*.

is slightly curved. The upper portion of the implement is rudely fashioned and was probably inserted in a socket of wood or antler, or lashed to a wooden handle after the manner of adze blades or skin scrapers in use among the Eskimo. A side view of a thick blade or celt with cutting edge slightly curved is given at *c*. The implement is polished for a short distance above the edge, the remainder of its surface showing rough pecking. The gouge at the

top of the illustration is of the ordinary form although the groove is relatively shorter than in the majority of the specimens found. The pendants *d*, *e*, *f* and *g* are of different sizes. Various degrees of skill are shown in their manufacture, although none are polished. The three largest were found outside the layer of ochre, two at a depth of six inches, and the third seventeen inches below the surface. Two fragments of an object of dark slate, *j* and *k*, are ornamented with longitudinal incised lines. The remaining portion of this object could not be found. The implements *h* and *i* are probably arrowpoints. They are made of light green slate and are polished. When found



FIG. 21. Chipped arrowpoint, Grave H, Section A, Bucksport, Me. †

they were lying side by side with their points toward the zenith.

Another deposit of ochre at a depth of eighteen inches (Grave H) was found a short distance to the northeast. Lying upon the paint was the small arrowpoint illustrated in Fig. 21, while near the ochre were a few ashes which are indicated by the dotted circle in the plan. A discoloration of the earth was noticed near the ochre, probably occasioned by the decomposition of the body.



FIG. 22. Rude knife (a chip from a small quartzite boulder), Grave G, Section A, Bucksport, Me. †

Grave G, in the northeast corner of Section A, contained two deposits of red ochre, one nearly over the other, at depths of eighteen and twenty-two inches. A rude knife, consisting of a single chip struck from a water-worn quartz-



FIG. 23. Celt-like implement (a stone of natural or slightly modified form), Grave G, Sec. A, Bucksport, Me. †

ite stone, Fig. 22, was the only object found in the lower deposit of ochre. Upon the deposit of paint nearer the surface lay two weathered celts with slightly curved cutting edges, a pair of firestones changed to limonite, and the rude celt-like implement of natural or slightly modified form shown in Fig. 23.

In Grave F, near the northwest corner of Section A, at a depth of twenty-six inches were found the well-preserved implements illustrated in Fig. 24. The larger implement *b* is a celt of medium size with a perfectly preserved

and slightly curved cutting edge. A shallow groove runs nearly the entire length of the side shown in the drawing. The surface of the tool is polished for a short distance only upon either side above the edge. The smaller celt or blade, a side view of which is given in *a*, has a cutting edge but slightly curved. Both of these specimens are made of a fine-grained metamorphic igneous rock. The chipped knife *c* lay beneath the edge of the larger implement in the position shown in the plan. The pendant *d* with a countersunk depression in its lower side was also in contact with the celt.

SECTION B.

But three small deposits of ochre were found in Section B. They were about three feet apart and were probably placed in one grave (Grave S), although it is possible that each deposit marked a separate grave. One of the masses of ochre (No. 37), at a depth of twenty-five inches, contained the polished slate arrowhead illustrated in Fig. 25. The ochre a short distance to the northeast, also at a depth of twenty-five inches, contained a small gouge with battered edge. To the left of this implement lay a wedge-shaped celt with a nearly straight cutting edge.

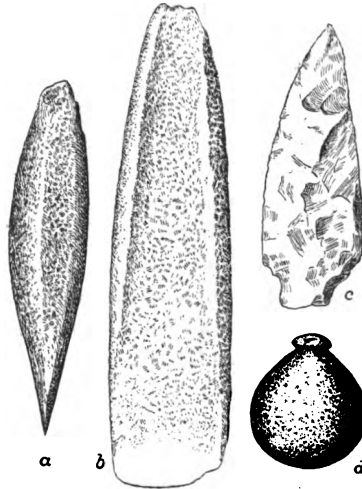


FIG. 24. Implements from Grave F, Section A, Bucksport, Me. *a*, *b*. Celt-like blades. *c*. Chipped knife. *d*. Pendant. †

The upper portion was rudely made and tapered to a blunt point which probably fitted into a socket. This blade was accompanied by a small quantity of ochre at a depth of sixteen inches. A short distance to the north, twenty-four inches deep in the gravel, lay a pear-shaped pendant unaccompanied with paint. A second pendant (No. 20) was found north of the centre of Section B, lying beneath the sod.

SECTION C.

The only burials found in this section were in the northwest corner. Each deposit may mark a separate grave. Owing to the coarseness of the gravel and the length of time which had elapsed since the graves were made, all traces of the line of demarcation had disappeared and it was impossible to determine their outlines. Consequently it could not be ascertained whether the single implements in deposits Nos. 35, 36 and 66 belong to Grave L or mark separate burials.



FIG. 25. Polished slate arrowpoint, Grave S, No. 37, Section B, Bucksport, Me. †

There was also a very small quantity of yellow oxide of iron, the remains of a firestone.

No. 35 contained a gouge of uncommon form, nine inches in length, with a slightly curved cutting edge two and one-half inches in width. The implement gradually narrows to one and one-half inches at the smaller end. The groove is broad and shallow.

No. 36 contained a small flat pebble, highly polished.

The implements shown in Fig. 26 were taken from Grave L. They consist of a pendant, a celt and a fire-making set. The felsite hammerstone is shown at the left. The nodule at the right is the matrix which enclosed crystals of iron pyrites. The crystals have disappeared, only a little oxide of iron in powder remaining in the cavities.

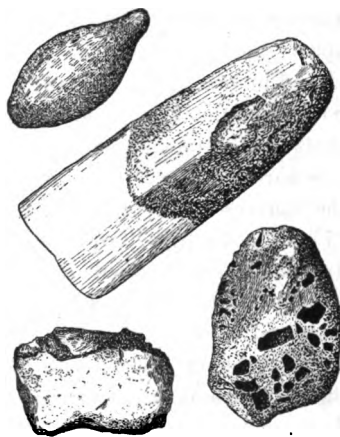


FIG. 26. Implements from Grave L, Section C, Bucksport, Me. Pendant, celt-like blade and fire-making set. †

SECTION D.

A large gouge (No. 60), with a shallow groove and part of its edge broken away, was found just below the turf unaccompanied

by ochre. This was probably left upon the surface, as its broken edge would render it useless as an implement.

Grave N contained a small mass of ochre twelve inches from the surface, and a pendant of the usual form lying at one side of the point.

A mass of ochre and the remains of a fire-making set were taken from Grave R at a depth of sixteen inches.

Grave Q contained the series of implements illustrated in Fig. 27. A small deposit of ochre was encountered eighteen inches beneath

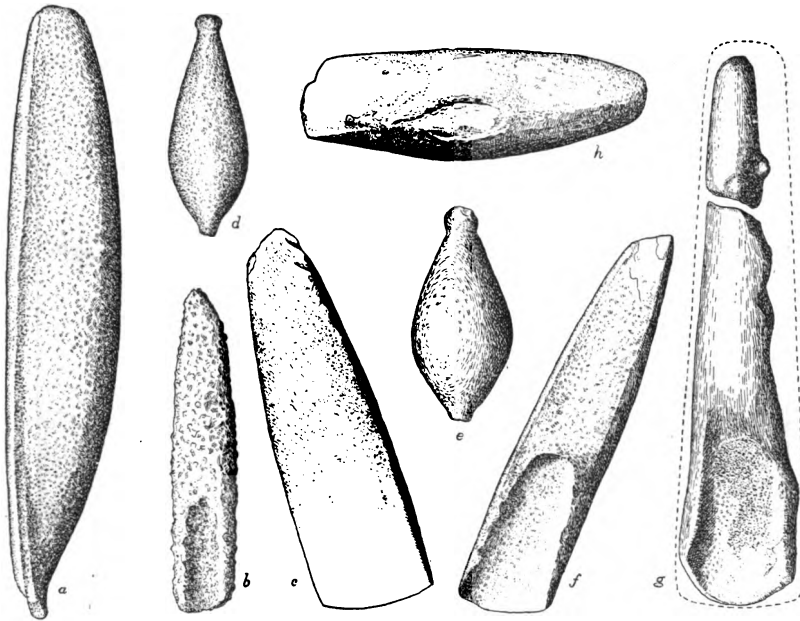


FIG. 27. Implements from Grave Q, Section D, Bucksport, Me. *a, b, f, g.* Gouges. *c, h.* Celt-like blades. *d, e.* Pendants. †

the surface together with a large and small gouge, *a* and *b*, the celt *c* and the two pendants *d* and *e*. The position of these implements is shown in the accompanying illustration, Fig. 28. Three large stones had been placed in the grave with the body; these are also shown in the drawing. After photographing this deposit and removing the stones, three additional implements *f*, *g* and *h* were found beneath the stones, and also a small quantity of yellow oxide of iron, all that remained of a fire-making set.

Some of these implements bear evidence of extreme age. Fig. 27 *a* is a gouge originally of beautiful form and finish. The surface is much weathered, the cutting edge having wholly crumbled away. That portion of the implement near the edge turns backward, an unusual way of finishing this part of the tool. The small gouge *b* is very much weathered, the whole surface of the implement being badly corroded, the cutting edge and the greater portion of its lower end having become wholly disintegrated. The well-preserved blade *c*, made from a compact stone, is evidently formed for insertion in a socket. The implement is polished for a space upon either side above the straight edge which is perfectly preserved. Two well-modelled pendants, *d* and *e*, have unpolished

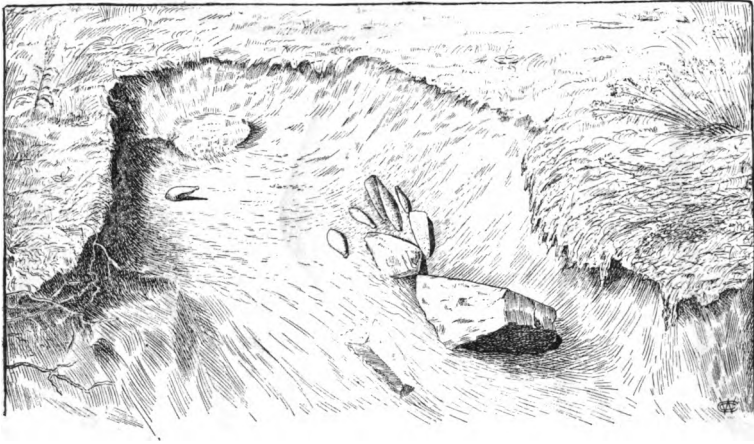


FIG. 28. Grave Q, Section D, Bucksport, Me. (From Photograph.)

surfaces. The implement *h* with a slightly curved edge had been placed in contact with a firestone, the oxidation of which caused the disintegration of that portion of the blade near the point of contact. The gouge shown in *f* was lying in a small quantity of ochre. The edge is in a good state of preservation and is unevenly ground. This tool shows little weathering. The badly disintegrated specimen *g* was lying near, but not in contact with, a mass of yellow oxide of iron in powder, the remains of a firestone. This gouge was broken in two pieces, probably by the weight of a large stone found above it. It was probably broken soon after its burial. The dotted lines indicate very nearly the original outline of the gouge,

and although it was made of comparatively soft stone it exhibits a remarkable amount of decomposition. This implement was buried about two feet beneath the surface and the decomposition was wholly subsequent to its burial as is proved by the contour of the broken edges of the two pieces. The oxidation of the firestones doubtless assisted in this destruction.

The six pendants, illustrated in Fig. 29, were lying in various positions within a radius of three feet from the principal deposit of implements in Grave Q. The depths at which they were found varied from ten to eighteen inches. One of these pendants, *e*, was accompanied by red ochre and a small quantity of yellow oxide of iron (Grave O). The others were unaccompanied by pigment, and they may form parts of the deposits within Graves O, Q and R.

Fig. 29 *a* and *b* were between Graves Q and R. The latter

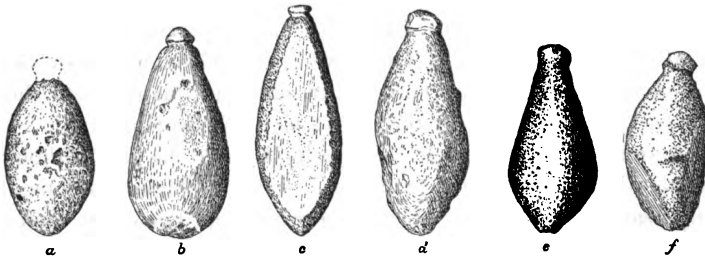


FIG. 29. Pendants from near Grave Q, Section D, Bucksport, Me. 4

implement (No. 47, plan) is also shown lying a short distance to the left of the main deposit in Fig. 28. The pendant *c* (No. 45, plan) is made from a broken celt or gouge, the flattened, polished sides of the blade forming the sides of the pendant. The two other specimens, *d* (No. 57, plan) and *f* (No. 50, plan), are rudely fashioned. The natural surface of the stone from which the latter was formed is shown near the base upon either side.

Grave R contained ochre at a depth of sixteen inches and a felsite hammerstone once forming part of a fire-making set.

SECTION E.

This section contained but two burials, Graves M and P. A large, straight-edged blade, No. 61, was found just beneath the sod. This was probably left upon the surface by the Indians.

A large gouge with shallow groove and slightly curved edge lay with ochre ten inches beneath the surface in Grave P.

The deposit in Grave M consisted of the usual quantity of red ochre, a small amount of buff powder, probably pigment, a highly polished pebble, probably used as a paint pestle, and the remains of two firestones, one of which had changed to limonite. Nothing remained of the second nodule but a mass of yellow oxide of iron in powder.

SECTION F.

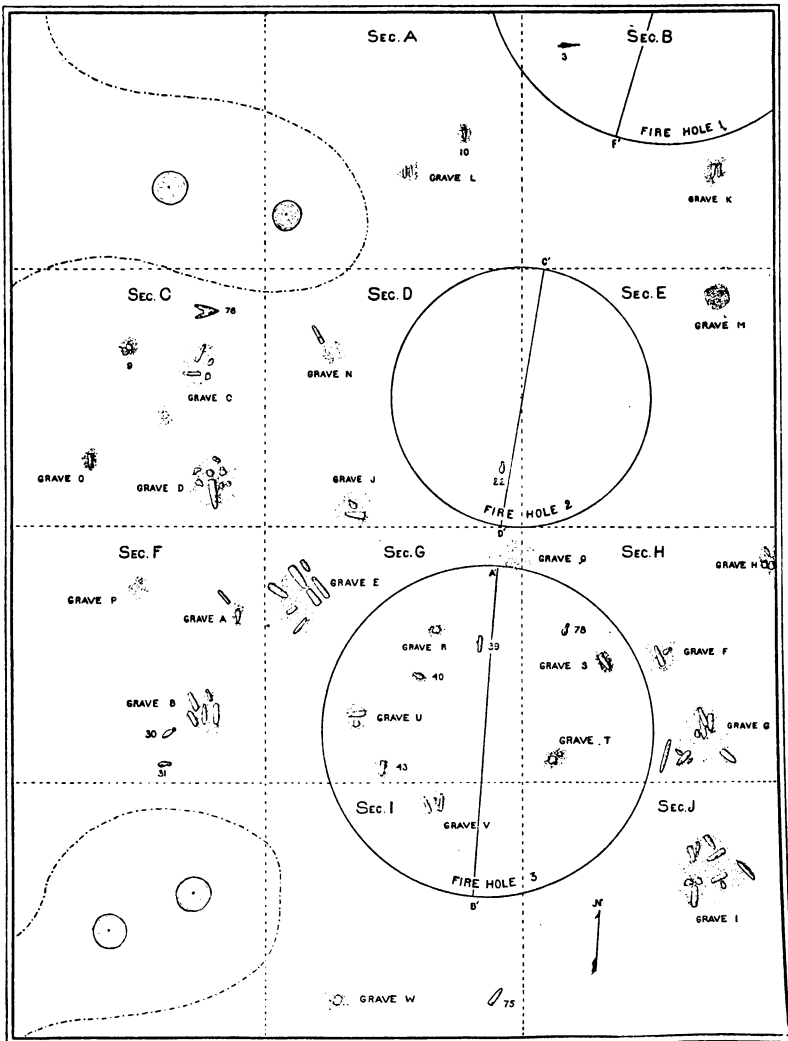
No implements were discovered in Sec. F. Two small deposits of ochre occurred just under the sod, and a few ashes were also found which are indicated by the dotted circle.

In a few instances dark discolorations of the gravel, the result of decomposing human remains, were noticed in connection with the graves in this cemetery. The discolorations were fewer and of less extent than in the Ellsworth burial place. Ashes were found only incidentally. There were no well-marked ash beds over the graves, but ashes occurred in sufficient quantities to show that fires were lighted over the graves as at Ellsworth.

I found no burials outside the area included in the plan, although considerable ground was explored. Two or three implements lying near the surface were discovered which had been discarded or accidentally lost.

BURIAL PLACE AT ORLAND.

This ancient cemetery was located upon a symmetrical gravel knoll of glacial formation, rising from the shore of a small inlet or bay upon the western side of Lake Alamoosook, near its outlet. The summit of the knoll is fifteen feet above the surrounding low land. Its oval base has a maximum diameter of about one hundred feet. The knoll and the surrounding land were covered with a thick growth of wood, many of the trees being a foot or more in diameter. Three depressions from twenty-seven to thirty-two inches in depth and having diameters at the surface of from ten to fourteen feet occupied the summit of the knoll. (See Plate IV, Fire-holes 1, 2 and 3, and Figs. 45, 46, 47.) These depressions were called "Indian cellars" by the people of the neighborhood. A superficial examination of these depressions resulted in obtaining



PLAN OF PREHISTORIC BURIAL PLACE, ORLAND, MAINE.

THE SHADING INDICATES RED OCHRE, UPON OR WITHIN WHICH MOST OF THE IMPLEMENTS WERE FOUND.

several pieces of charcoal and some ashes. Being convinced of the Indian origin of these depressions, a narrow trench was cut along the summit of the knoll and at a depth of fifteen inches were found a mass of red ochre and two implements. (Plate IV, Grave J, Section D.)

This land is owned by Mr. J. Foster Soper of Orland, who not only granted permission to explore the burial place but assisted in many ways.

All the trees upon the knoll were removed with the exception of three large oaks and a white birch. The positions of these are shown near the corners at the left on Plate

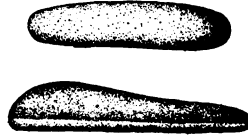


FIG. 30. Polished pebbles from Grave L, Section A, Orland, Me. †

IV. The trees were removed in the following manner. Each tree was cut off five or six feet from the ground and ropes and double blocks fastened to the upper end of the stump and to a neighboring tree. A pair of oxen was hitched to the end of the rope and the stumps drawn out without disturbing the earth to any great extent. The roots of the trees did not penetrate deep enough to displace any of the implements. After removing the stumps, the ground was staked off in sections ten feet square, and the explorations were conducted in the same manner as at the burial places already described.



FIG. 31. Polished slate point No. 3, Section B, Burial Place, Orland, Me. †

The whole area of the gravel knoll was explored, but the graves were found principally upon its summit and western side. No traces of bone were found in any of these graves, neither could the outline of any grave be determined. Various natural causes, including the percolation of water during many centuries, had completely obliterated all traces of the line of junction between the disturbed and undisturbed gravel. The outlines shown in the vertical sections of the large fire holes could, however, be traced.

SECTION A.

Two deposits of red ochre were found in this section, but I am uncertain whether these indicate the presence of one or two graves. The larger deposit of ochre, Grave L, contained the two polished

pebbles of natural form illustrated in Fig. 30. They lay thirty inches below the surface. A knife chipped from compact stone, resembling felsite, lay twenty-four inches below the surface in the smaller mass of pigment (No. 10).

SECTION B.

This section contained but one grave (K). Upon the ochre, twenty inches from the surface, had been deposited two very rude celts with slightly curved cutting edges, also a polishing stone or paint pestle of natural form, and a fire-making set. Nothing re-

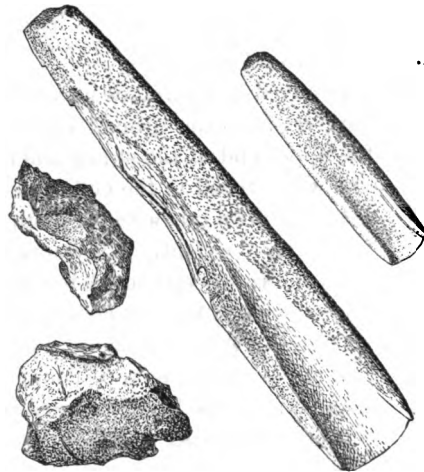


FIG. 32. Implements from Grave C, Section C, Orland, Me. 4

mained of the decomposed pyrites but a mass of yellow powder. A polished point (Fig. 31) was found four inches below the surface, just within the saucer-shaped depression of fire hole No. 1. It was made of a light green compact slate similar to the material from which the polished points from Ellsworth and Bucksport were manufactured.

SECTION C.

Grave O, twenty-nine inches from the surface, was encountered near the southwestern corner of this section. It contained the usual red pigment and a medium-sized celt which had evidently been inserted in a handle. The edge was sharp and slightly curved.

Grave C contained a large quantity of ochre at a depth of thirty-six inches. Upon the pigment were the remains of two firestones and the finely finished gouges illustrated in Fig. 32. The larger gouge had been placed in contact with one of the firestones, the oxidation of which caused the gouge to crumble at the point of contact. The smaller gouge, four inches in length, is a fine example of ancient stone working.

Two small masses of paint lay about two feet from these implements in a position which formed with this deposit three points of a triangle. These small deposits of ochre may have been a part of Grave C, but it seems more probable that they marked separate graves. One was twenty-four inches below the surface

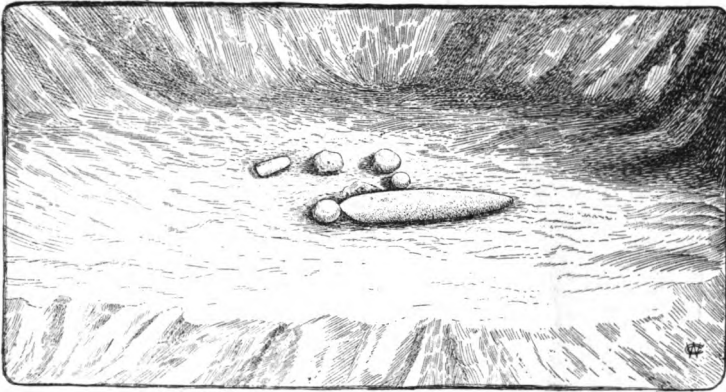


FIG. 33. Grave D, Section C, Orland, Me. (From Photograph.)

and did not contain any object. Its companion (No. 9), at a depth of twenty-two inches, contained a partially disintegrated firestone.

Near the southeastern corner of the section red ochre was encountered at a depth of thirty-six inches (Grave D), together with a gouge ten inches in length which lay with its grooved side downward. This was accompanied by a very small gouge two and three-eighths inches in length with a cutting edge three-fourths of an inch in width, two partially disintegrated firestones, a mass of yellow oxide of iron in powder and three round water-worn pebbles, one inch, one and one-half inches, and one and three-quarters inches in diameter respectively, their forms unmodified by art (Fig. 33). The pebbles were very symmetrical, being nearly globular, and their

surface showed no signs of use as implements. After photographing and removing the implements another crumbling firestone was found which is not shown in the illustration. A part of the cutting edge of the large gouge and a portion of its side was in a crumbling condition owing to its contact with a lump of pyrites. The small gouge was in perfect condition, its edge being appar-

ently as sharp as when placed in the grave. This implement would be of little value unless inserted in a handle and it is probable that it was hafted when deposited.

The unique stone implement illustrated in Fig. 34 was found just below the sod (No. 76, Plan). It was roughly fashioned and parts of it, notably the V-shaped cavity and edges, show marks of pecking. The point is somewhat worn. This object if properly hafted would answer admirably for a digging implement and may have been employed in digging the graves.



FIG. 34. Implement, No. 76, from just beneath sod, Section C, Burial Place, Orland, Me. }

SECTION D.

Two graves were found in this section. Grave J, fifteen inches below the surface, is the one already alluded to as discovered while sinking the preliminary trench. This contained a medium-sized gouge and a rude pendant of the typical form embedded in red ochre.

Grave N, situated a few feet farther north, contained a mass of red ochre ten inches below the surface. At one side of the pigment and at the same level lay the fine example of ancient stone art of which Fig. 35 is a drawing.

One or more firestones of pyrites had been placed in the grave in contact with the implement. These had become entirely disintegrated, nothing remaining but a small quantity of yellow powder adhering to the gouge. Within the limits of fire hole No. 2, a

pendant (No. 22) was unearthed thirty-six inches below the surface. No ochre accompanied the implement.

SECTION E.

Indications of but one burial were found in this section. This grave (M) contained only a mass of ochre twenty inches from the surface.

SECTION F.

Grave P contained only red ochre, at a depth of twenty-one inches.

In Grave A a mass of red ochre was discovered thirty-two inches beneath the surface. Upon the point lay the chipped knife of black flint illustrated in Fig. 36. The angles formed by chipping are worn and polished, probably by the long use of this tool as a cutting implement. Its companion, a small gouge, is also illustrated in Fig. 36. This was found just outside the ochre. The cutting edge is less than a half inch in width and is perfectly preserved.

The contents of Grave B, with the exception of two pendants (Nos. 30 and 31), are shown in Fig. 37. This drawing was made from a

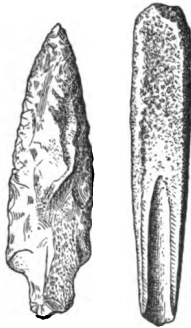


FIG. 36. Implements from Grave A, Section F, Orland, Me. 1

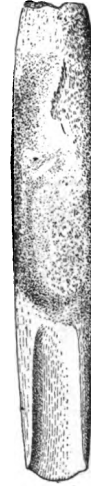


FIG. 35. Gouge, from Grave N, Section D, Orland, Me. 1

photograph and shows the exact positions in which the implements were found. The two pendants (Nos. 30 and 31, Plate IV) lay at the same depth as the main deposit (27 inches) and evidently belong to the same grave. They were removed before the main deposit was uncovered, hence they do not appear in Fig. 37. The implements shown in this illustration consist of two gouges, two celts and a pendant lying upon a small quantity of red ochre.

The implement lying nearest the wall of earth is a well-formed gouge with its grooved side downward. Near the centre of the deposit was another gouge with a narrow cutting edge. A celt with a slightly curved cutting edge lay near

this gouge and to the right was another celt of similar form. The pendant at the left is small and roughly made.

SECTION G.

Grave R, twenty inches in depth, contained ochre and a disintegrated firestone. A short distance from this deposit were two other masses of ochre, Nos. 39 and 40, one at a depth of twelve inches, and the other twenty inches below the surface. Above the former deposit of red ochre, but not in contact with it, was a celt with battered surface and broken edge. The latter deposit of ochre

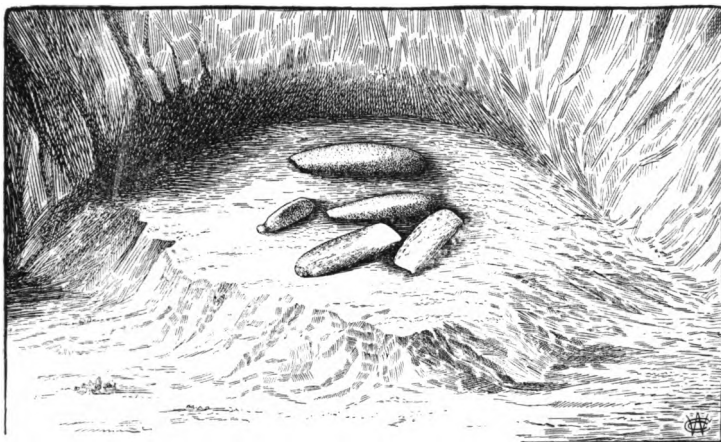


FIG 37. Grave B, Section F, Orland, Me. (From Photograph.)

contained a pendant and a little oxide of iron, the remains of a firestone.

A felsite hammerstone once forming a part of a fire-making set, a celt, and the disintegrated remains of a nodule of pyrites, were found upon red ochre at a depth of twenty-nine inches in Grave U. About three feet to the southeast of this grave lay a gouge with shallow groove, a small mass of yellow oxide of iron and a deposit of red ochre (No. 43).

Grave E. In the northwest corner of this section and outside the limits of fire hole No. 3, at a depth of thirty-two inches, lay the seven implements illustrated in Fig. 38, together with the usual

quantity of red ochre. The gouge *a*, with a portion of its edge broken away, lay farthest to the west with its grooved side downward and its cutting edge outward. A similar but shorter gouge, *b*, was the most easterly in the grave. This was also lying with the grooved side downward and its cutting edge outward. The celts *c* and *d* have nearly straight cutting edges. They were lying near the middle of the grave with their upper ends near together and their edges outward. The rude implement *e*, which somewhat resem-

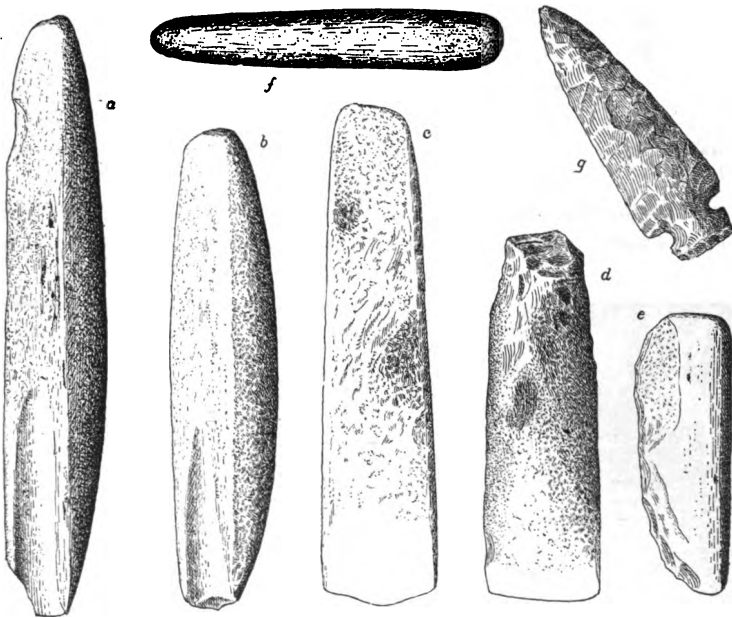


FIG. 38. Implements from Grave E, Section G, Orland, Me. *a*, *b*. Gouges. *c*, *d*. Celt-like blades. *e*. Pebble with battered edge. *f*. Pebble with polished surface used as an implement. *g*. Chipped knife. †

bles a primitive chopping knife, has a greater portion of its surface polished, one edge being battered or rudely chipped. The object represented at *f* is probably a polishing stone of natural form, about seven-eighths of an inch in width with an average thickness of three-eighths of an inch. These two implements lay farthest to the south. The symmetrical knife *g* is of dark flint, and lay farthest north with its point inward.

Near the northeastern corner of Section G, at a depth of eighteen inches was unearthed a mass of ochre (Grave Q). No implements were found in this grave.

SECTION H.

Near the centre of this section and fifteen inches below the surface was a deposit of red ochre containing a pendant, a well-formed gouge and a small mass of yellow oxide of iron, the remains of a firestone (Grave F). A short distance to the west and thirteen inches deep in the gravel another deposit of ochre was encountered (Grave S), containing a well-preserved celt with a straight cutting edge. A pendant (No. 78) lay near the surface of the grave in ashes. The ochre in Grave T contained a crumbling fire-making set thirty inches below the surface.



FIG. 39. Chipped Arrowpoint, Grave H, Section H, Orland, Me. †

In the northeastern corner of this section was Grave H. The ochre which marked this burial was seventeen inches below the

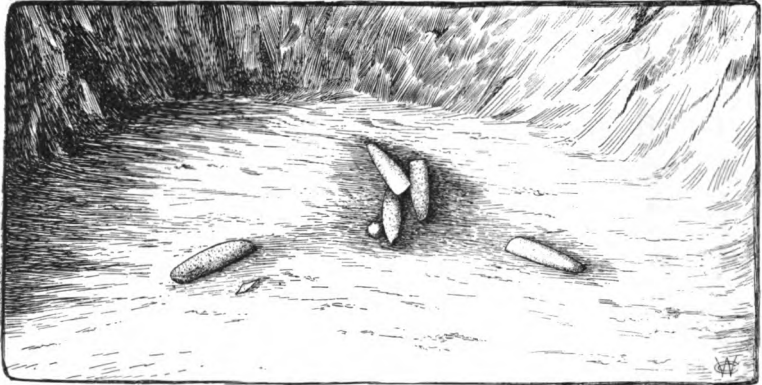


FIG. 40. Grave G, Section H, Orland, Me. (From Photograph.)

surface and of unusual brilliancy. The arrowpoint, Fig. 39, lay with its point near the centre of the mass of pigment. Two partially disintegrated firestones occupied a position just south of the arrowhead.

An interesting series of implements and the usual quantity of red ochre were obtained from Grave G. Fig. 40 shows seven of

these implements, just as they were uncovered. Four of them lay together, and are shown near the centre of the illustration. The upper one at the left is a thin celt or celt-like blade with a straight cutting edge. The upper portion of this implement was undoubtedly inserted in a socket. To the right, just below the edge of this tool, lay another celt with a slightly curved cutting edge. Below the former implement was a gouge upon its side, in contact with a crumbling firestone. A finely formed celt lay a short distance to the right with its cutting edge toward the main deposit. At the left another and thicker celt occupied a corresponding position. Its edge is slightly curved, the concave side being downward. By the side of this implement was the small arrowpoint of slate, illustrated in Fig. 41.



FIG. 41. Arrow-point of polished slate, Grave G, Section H, Orland, Me. †

After removing these implements, further excavations revealed the finely formed gouge and the pendant shown in Figs. 42 and 43. These were a few inches below the main deposit. The gouge lay with its grooved side downward. Its length is ten and one-half inches. Its width at the cutting edge is one and one-half inches, and it gradually tapers to seven-eighths of an inch at



FIG. 42. Gouge, Grave G, Section H, Orland, Me. †

the smaller end. Its greatest thickness is one and one-fourth inches. The pendant has the appearance of having been fashioned from a broken celt. The relative position of these implements is shown in the plan.

SECTION I.

But two graves were found in this section. Grave V contained red ochre, the remains of a firestone, a rude celt and a gouge made from a long, thin pebble, the only modification in the shape of the pebble being the grinding necessary to form the curved cutting edge of the tool.

Grave W contained red ochre twenty inches from the surface, a partially disintegrated firestone and a small mass of oxide of iron,

probably the remains of a second firestone. A small celt, No. 75, lay within the sod near the southeast corner of the section.

SECTION J.

The largest number of implements obtained from one deposit in this cemetery were found in Grave I, at a depth of twenty-one inches, lying in red ochre. These ten implements are shown in position in Fig. 44. A large stone had evidently been placed with the body in this grave. One of the tools, a rude celt or celt-like blade, lay with its edge against the stone. Two similar implements with slightly curved edges and a gouge having a narrow edge lay near together, a short distance from the stone, each with its inner or concave side uppermost. To the right, as shown in the illustration, a celt with curved cutting edge lay upon its side. To the left, in a corresponding position, was a similar implement with its edge near a



FIG. 43. Pendant, Grave G, Section H, Orland, Me. †



FIG. 44. Grave I, Section J, Orland, Me. (From Photograph.)

pair of firestones which are changed to limonite. A small fragment of matting, evidently woven of rushes, and a piece of what appears to be birch bark are preserved by contact with the iron.

A pendant, with its grooved end lying against the side of another celt, occupied an intermediate position, as shown in the illustration.

The outer limits of the three depressions along the summit of the knoll, which first drew my attention to this burial place, are

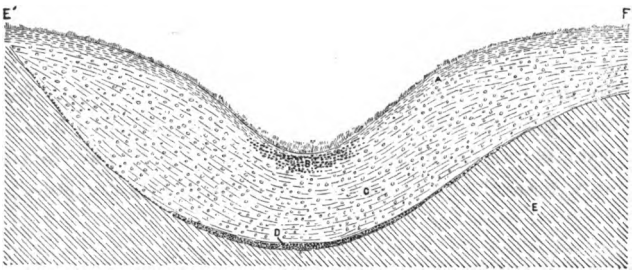


FIG. 45. Vertical cross section E', F', through Fire Hole 1, Orland, Me. A. Top soll. B. Charcoal and ashes. C. Disturbed gravel within fire hole. D. Discolored earth containing a little charcoal and red ochre. E. Undisturbed gravel.

shown by the circles in Plate IV. The depression of fire hole No. 1, of which but a portion is shown upon the plan, measured thirteen feet from edge to edge. Its depth was thirty-two inches. A vertical cross section E'-F', Fig. 45, shows it to have been originally

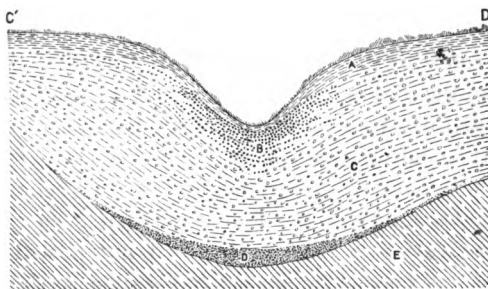


FIG. 46. Vertical cross section C', D', through Fire Hole 2, Orland, Me. A. Top soll. B. Charcoal and ashes. C. Disturbed gravel. D. Discolored earth containing a little charcoal and red ochre. E. Undisturbed gravel.

dug to a depth of fifty-eight inches. At the bottom of the hole as originally dug, lay a thin mass of discolored earth, a few bits of charcoal and a small quantity of red ochre. Charcoal and ashes occurred below the surface near the centre of the depression.

Fire hole No. 2 measured ten feet from edge to edge. The

depression was twenty-seven inches in depth, and the vertical cross section C'-D', Fig. 46, shows it to have been originally dug to a depth of sixty inches. A large mass of discolored earth, some charcoal, and a small quantity of red ochre lay at a depth of five feet. Charcoal and ashes were found below the surface near the centre of the pit.

Fire hole No. 3 was fourteen feet in diameter, with a central depression of twenty-eight inches. It had originally been dug to a depth of fifty-nine inches. A cross section, A'-B', Fig. 47, shows the same general conditions to be present as in Nos. 1 and 2. No ochre was found at the bottom of the original excavation. There were several graves within the limits of this fire hole, as will

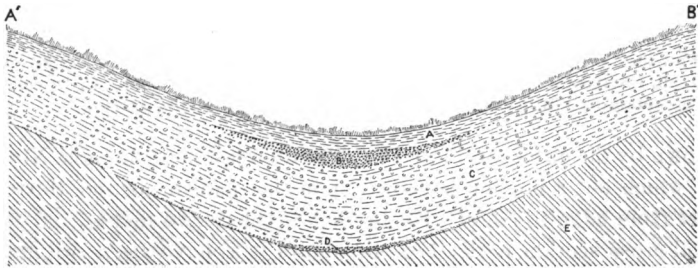


FIG. 47. Vertical cross section A', B', through Fire Hole 3, Orland, Me. A. Top soil B. Charcoal and ashes. D. Discolored earth. E. Undisturbed gravel.

be seen by referring to the plan. These burials may have been subsequent to the digging of the hole; but, as the line of junction between the disturbed gravel within the fire hole and the undisturbed earth without could only be traced in a few places, it could not be ascertained whether the graves marked by the ochre and implements within the limits of the depression were a part of the great fire hole, or of earlier or later date. Is it not probable that these great depressions were communal graves similar to the one at Ellsworth (see Fig. 8), and that all traces of the bodies placed therein had disappeared?

Charcoal, ashes and discolored earth were found to a limited extent in the gravel throughout this burial place.

THE IMPLEMENTS FROM THE GRAVES.

In the following table, the broad classification of the more common implements taken from the three burial places shows the number of objects of the same type from each cemetery, and the relative numbers of the various forms from a given locality. Only the implements taken by the author from the graves are recorded.

	ELLIS- WORTH.	BUCKS- PORT.	ORLAND.	TOTAL.
Arrowpoints { Chipped.....		1	1	2
		3	1	4
Polished.....				
Spearpoints Polished.. ..	1		1	2
Chipped Knives.....	2	8	3	13
Celt-like Blades, with straight, or nearly straight, cutting edges, the smaller ends apparently fashioned for insertion in sockets of wood or antler. Type, Fig. 48.....	3	7	11	21
Celts, or Celt-like Blades of symmetrical form with curved cutting edges, probably once lashed to handles and not inserted in sockets. Type, Fig. 49.....		12	11	23
Grooved Gouges of the same general outline as the celts with curved edges, and probably attached to hafts in a similar manner. Type, Fig. 50.....		12	17	29
Pear-shaped Pendants.....	10	21	10	41
Firestones, originally nodules of iron pyrites. These are in various stages of decomposition.....	4	7	14	25
Hammerstones, which accompanied nodules of iron pyrites.....	1	3	1	5
Pebbles of natural, or but slightly modified forms, used as polishing stones, paint pestles and for other purposes.....	1	4	8	13
Totals.....	22	78	78	178

The great majority of these objects were evidently for use in the ordinary domestic affairs of every-day life. The comparative rarity of weapons or parts of weapons is noticeable. Only the arrowpoints and polished spearpoints can with any degree of certainty be so classed.

ARROWPOINTS.

The majority of the arrowpoints are of polished slate. These are illustrated in Figs. 20 *h*, *i*, 25 and 41. The two chipped specimens are shown in Figs. 21 and 39.

SPEARPOINTS.

The only specimen found *in situ* which can without doubt be classed as a spearpoint is shown in Fig. 13. Its position in the grave was such as to indicate its attachment to a long wooden shaft (see Fig. 12). Fig. 31 seems large for an arrowpoint and in the table is classed as a spearpoint.

The spearpoints illustrated in Fig. 16 were taken from graves previous to the explorations conducted by the author.

CHIPPED KNIVES.

Several of the knives of the type illustrated in Figs. 4, 14 *g*, 17, 18 *c*, *d*, *e*, 24 *c*, 36 and 38 *g*, are worn and polished by long use. The majority are chipped from felsite. A few are of flint or slate. The position in which some of the specimens were found renders their employment as projectile points improbable, while their worn surfaces indicate their use as cutting and scraping implements. The not uncommon occurrence of chipped knives of this form, hafted in short wooden handles, from the cliff dwellings of the southwest and from burial places in various parts of America, indicates an almost universal use of knives of this type by the prehistoric peoples of this continent. It is not inferred that similar objects were not also used as projectile points, for it is well known that spears with chipped stone heads have been in use among primitive tribes within historic times.

CELT-LIKE BLADES WITH CUTTING EDGES STRAIGHT OR NEARLY SO.

These implements, which are from three inches to nine and one-half inches in length, have straight or slightly curved cutting edges. The upper portion of the tool usually tapers to a blunt point and is frequently rudely finished. They were doubtless inserted in sockets of wood or antler or lashed to handles after the manner of the adze blades and "skin scrapers" in common use among

the Eskimo and other primitive peoples, and to which they bear a close resemblance. Type specimen Fig. 48. Other examples are illustrated in Figs. 14 *a, b, c*; 20 *b*; 27 *c*.

Although of the same general form, I have not included in this type the perforated implement shown in Fig. 18 *b*. Unlike the majority of blades this tool is polished over its entire surface. The perforation is evidently for the purpose of attaching a cord, and the implement may have been used without a haft.

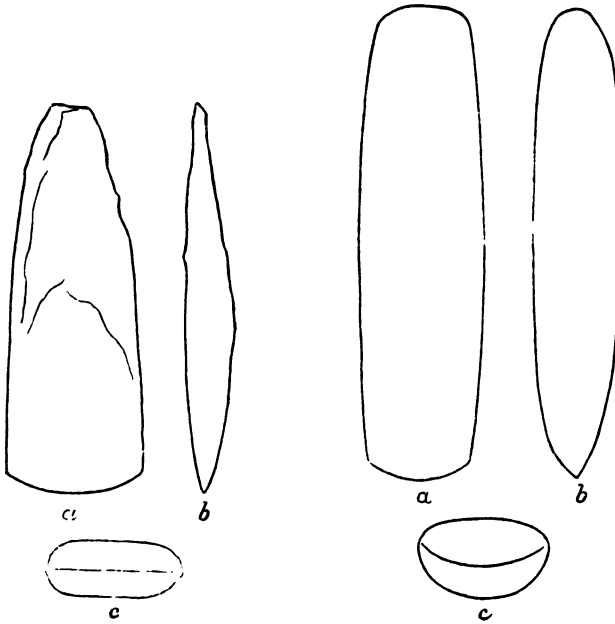


FIG. 48. Celt-like blade. Type specimen. *a*. Front view. *b*. Side view. *c*. End view showing straight cutting edge. †

FIG. 49. Celt, Type specimen. *a*. Front view. *b*. Side view. *c*. End view showing curved cutting edge. †

CELTS OR CELT-LIKE BLADES WITH CUTTING EDGES CURVED.

These implements are of symmetrical form with well finished surfaces and curved cutting edges. They are of the same general form as the gouges, the principal difference being the absence of the groove. They vary in length from four inches to eight inches and were probably lashed to hafts and not inserted in sockets. Type specimen Fig. 49. Numerous other examples of this form

together with the following types are represented in the foregoing drawings.

GROOVED GOUGES.

The so-called gouges vary from two and three-eighths inches to ten inches in length, with cutting edges from one-half inch to two and one-half inches in width. They are of symmetrical form and are carefully finished. A few of the specimens are polished over a greater portion of their surface, but the majority are polished only for a short distance above the edge upon either side. Type specimen Fig. 50. While it is possible that these implements were used without hafts, it seems more probable that they were lashed to handles and used after the manner of adzes and skin scrapers. The smaller specimens, one of which is represented at the right in Fig. 32, would be of little use without a handle. Gouges and celts are frequently found in New England, having either ridges or a groove upon the back or convex side evidently for the purpose of holding the lashings in place.

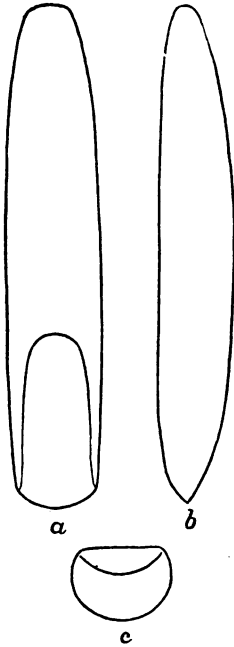


FIG. 50. Gouge. Type specimen. *a.* Front view showing groove. *b.* Side view. *c.* End view showing curved cutting edge. †

PEAR-SHAPED PENDANTS.

Many of these puzzling objects were taken from the graves. In several instances a pendant was, with the exception of the red ochre, the only imperishable object deposited with the dead. Other graves contained two, three and sometimes four or more (see Plate II, also Figs. 14 *d, e, f*; 20 *d, e, f, g*; 27 *d, e*, 29 and other illustrations). Their positions in the graves can be studied by referring to the Plates. These pendants occurred outside the deposits of ochre more commonly than the other objects and frequently at varying depths in the same grave. This was particularly noticeable at Bucksport. The various theories regarding the probable use of these objects need not be commented upon here. Much has been written upon the subject. The theory generally accepted is that they were used

as charm stones. Similar pendants are said to be still employed as charms by the modern California Indians. The advocates of this theory forget that ancient stone implements in possession of Indians supplied with tools and utensils of European manufacture are commonly regarded as sacred objects. As an illustration of this it is only necessary to call attention to the fact that many of the grooved stone axes and mauls in use up to 1870 by the Pueblo Indians are now considered sacred, and are deposited upon the altars in sacred ceremonies. Whatever may have been the use of these pendants it is certain that they occupied a prominent place among the implements and utensils used in the practical every-day life of the Indians.

FIRESTONES.

Nodules of iron pyrites of different degrees of purity which have mostly changed to limonite or powdered oxide of iron. These objects were once used in pairs or with hammerstones of felsite for kindling fires.

The collection comprises a fine series of these ancient fire producers in various stages of decomposition. The best preserved examples are illustrated in Fig. 18 *f*, and in the lower right hand corners of Figs. 19 and 26. The two latter specimens are shown with the felsite hammerstones found with them. In a few graves the hammerstone was accompanied by a small quantity of yellow oxide of iron in powder, the remains of a lump of iron pyrites which have become wholly disintegrated.

Other graves contained one or two nodules of what had been impure iron pyrites. The bisulphurate of iron having decomposed the impurities remained in the form of a cinder-like crust.

A few of these implements were originally of quartz or other varieties of stone containing the pyrites in disseminated crystals, which have disappeared with the exception of small quantities of yellow powder, leaving variously shaped cavities in the nodule. See Fig. 26, lower right hand drawing.

Occasionally nothing remained of either nodule except slight traces of the yellow oxide. Several single crumbling nodules were taken from the graves, but it is probable that each of these was originally accompanied by a nearly pure lump of pyrites all traces of which had disappeared.

From the accounts of various methods of primitive fire-making among historic tribes of America, we learn that fire-making sets

consisting of nodules of iron pyrites, or pyrites and flint were used by the Eskimo and the northern ranging tribes of the Athapascan stock, some of the Algonquins and the Beothuks of Newfoundland.

Among the Eskimo the use of pyrites as a means of fire-making ranged "from north of Dixon's Sound to Labrador, the following localities being represented, viz.: Stikine River, Sitka, Aleutian Islands, Kotzebue Sound, Point Barrow, the Mackenzie River district, at Fort Simpson, and probably Hershel Island, Pelly Bay, Melville Peninsula, Smith Sound, and Labrador."¹

Mr. Lucien M. Turner in a manuscript account of the Aleutian Islanders says:

"They use the four part drill but they also use pyrites. A stone containing quartz and pyrites is struck against another similar one, or a beach pebble, into a mass of sea bird down sprinkled with powdered sulphur."²

In his account of the Point Barrow Eskimo, Murdoch informs us that "they used to get 'great fire' by striking together two pieces of iron pyrites. Dr. Simpson speaks of two lumps of iron pyrites being used for striking fire, but he does not make it clear whether he saw this at Point Barrow or only at Kotzebue Sound. Iron pyrites appears to have been used quite generally among the Eskimo. Bessels saw it used with quartz at Smith Sound, with willow catkins for tinder and Lyon mentions the use of two pieces of the same material with the same kind of tinder, at Iglulik."³

Dr. Franz Boas, writing of the Central Eskimo, tells us that "wherever flint and pyrite are to be had these are used for striking fire."⁴

The Eskimo of Melville Peninsula, according to Parry, "use two lumps of common pyrites, from which sparks are struck into a little leathern case . . . containing moss well dried and rubbed between the hands. If this tinder does not readily catch, a small quantity of the white floss of the seed of the ground willow is laid above the moss. As soon as a spark has caught it is gently blown till the fire has spread an inch around, when the pointed end of a

¹ Hough. *Fire-making Apparatus in the U. S. National Museum*. Smithsonian Report, U. S. N. Museum, 1888, p. 572.

² Quoted by Hough. *Ibid.* p. 576.

³ Murdoch. *The Point Barrow Eskimo*. Ninth Annual Report Bureau of Ethnology, p. 291.

⁴ Boas. *The Central Eskimo*. Sixth Annual Report Bureau of Ethnology, p. 526.

piece of wick being applied, it soon bursts into a flame, the whole process having occupied perhaps two or three minutes."¹

"The Canadian and Algonquins strike two pieces of pyrites (*pierres de mine*) together over an eagle's thigh, dried with its down, and serving instead of tinder."²

Roger Williams tells us in his account of the construction of a wooden canoe or dug-out that he has "seene a Native goe into the woods with his hatchet carrying onely a Basket of Corne with him, and stones to strike fire when he had felled his tree."³

The extinct Beothuks of Newfoundland also used pyrites for fire-making.⁴

A comparison of the stones used for fire-making by historic tribes, as above quoted, with those taken from the graves shows the same variations as to material, viz.: pyrites and a flint hammerstone, nodules of pyritiferous quartz, or nodules of pyrites.

PEBBLES.

Probably used as polishing stones, paint pestles and for other purposes. These together with the few objects of uncommon form are described in the foregoing pages.

RED OCHRE.

The use of this pigment seems to have been universal among the Indians whose remains are found in these cemeteries. It varies in color from pink to deep red. In some of the graves only a small quantity had been deposited which the percolating water had mixed with the surrounding sand and gravel. In other graves a quart or more of pure dark red ochre was found with various implements lying upon it or buried within it. Plate II is a photographic illustration of a grave containing a large mass of the ochre and a pearshaped pendant. I know of no beds of this pigment in eastern New England, although they may occur in the iron region of central Maine. The ochre may have been brought from the British Provinces. The Beothuks of Newfoundland obtained much of their red paint from Red Ochre Island, Conception Bay. The eastern British Provinces, including Newfoundland, contain large

¹ Parry. Second Voyage, London, 1824, p. 504.

² Hough. Fire-making Apparatus in the U. S. National Museum. Smithsonian Report, U. S. N. Museum, 1888, p. 572 (Laftau. Moeurs des Sauvages Ameriquains).

³ Roger Williams. A Key into the Language of America, London, 1643.

⁴ Journal, Anthropol. Inst. Great Britain and Ireland, v. 5, p. 225.

deposits of iron and beds of ochre of various shades, and it would not be surprising if in that region there were many localities where red ochre was mined in prehistoric times.

ESKIMO, ALGONQUIN OR BEOTHUKS.

The great age of the sixty or more graves described in the foregoing pages is evident. The complete decay and disappearance of the skeletons (with the exception of the fragments shown in Fig. 11 and small quantities of bone dust in a few graves), the disintegration of the firestones of pyrites, and the decomposition which many of the implements have undergone when buried many inches beneath the surface, prove the burials to be among the oldest yet discovered upon this continent.

If the generally accepted theory of the comparatively recent eastward migration of the Algonquin tribes which inhabited New England at the advent of Europeans be correct, the burials in these old cemeteries cannot be attributed to that people.

The archaeological evidences of the occupation of New England by the Algonquins have, however, been but superficially examined. Most of the shell heaps are apparently of Algonquin origin. Those examined by the author cannot with our present knowledge be attributed to any other people. Even the great oyster shell heaps of Damariscotta contain implements of stone and bone and fragments of pottery of types in common use among the Algonquins when first known to Europeans. When the vast quantity of material collected by Professor Putnam from these heaps and from many others on the New England coast has been systematically studied it will doubtless throw much light upon the tide-water people or peoples of Maine.

The few graves containing skeletons which have been discovered along the New England coast are doubtless those of Algonquins. The pipes, pottery, beads and implements found therein are of types common among this people within historic times. The theory that the Skraelings of the Norsemen were New England Eskimo has as yet no archaeological confirmation. It is true that many bone arrow, spear, and harpoon points from the shell heaps are very similar to those used by the Eskimo, but we learn from Rosier's Narrative of Waymouth's Voyage to the Coast of Maine in 1605, that the Indians near Monhegan had [arrows]

"Big and long with three feathers tied on, and nocked very artificially, headed with the long shank bone of a deer made very sharp with two fangs in the manner of a harping iron. They had likewise darts headed with like bone, one of which I darted among the rocks and it brake not."¹

John Josselyn in his *Account of Two Voyages to New England* informs us that the Indians from their canoes strike the fish with

"A kind of dart or staff, to the lower end whereof they fasten a sharp jagged bone . . . with a string fastened to it, as soon as the fish is struck they pull away the staff, leaving the bony head in the fishes body and fasten the other end of the string to the Canow: Thus they will hale after them to shore half a dozen or half a score great fishes."

The polished slate implements of New England are similar to those of the Eskimo. They are also characteristic of the people whose graves are described in this paper and these are certainly not Eskimo graves if judged by the method of burial known to be Eskimo. The people whose remains are found in these cemeteries were evidently not makers of pottery. No potsherds were encountered within the graves or upon the surface of the burial places. Pestles, grooved axes, pipes, perforated gorgets and the so-called ceremonial implements, so common among the Algonquins, were also wanting.

The following brief extracts from the valuable papers of Mr. T. G. B. Lloyd upon the now extinct Beothuks² may throw some light upon the possible origin of these burial places. It is not improbable that the majority of the grooved gouges and polished slate implements found throughout New England and the British provinces were left by this people before being driven eastward by the invading tribes from the west.

When Cartier and other early explorers visited eastern America they found people inhabiting the island of Newfoundland who were known as the Beothuks or Red Indians.

"The epithet 'Red Indian' is given to the savages of Newfoundland from their universal custom of colouring their garments, canoes, bows and arrows, and every other utensil belonging to them, with red ochre, obtained by them from Red Ochre Island, Conception Bay."³

"They have great store of red ochre, which they use to colour their bodies, bows and arrows, and canoes."⁴

¹ Rosier's Narrative of Waymouth's Voyage to the Coast of Maine in 1605. Eastern Times Reprint, Bath, Me., 1860, p. 25.

² These Indians are supposed to have become extinct early in the present century.

³ T. G. B. Lloyd, The Beothuks. *Journal of the Anthropological Institute of Great Britain and Ireland*. Vol. IV, No. 1, p. 23.

⁴ Purchase. Quoted by Lloyd. *Ibid.* p. 22.

From the accounts of the different modes of burial in practice among the Beothuks I quote the following :

"The most common method of interment was that of placing the body in a wrapping of birch bark and covering it well with a pile of stones, if such it can be called. But sometimes it was put a foot or more under the surface of the ground before the stones were placed on it, and in one place, where the ground was sandy and soft, the graves were deeper, and on them no stones were placed."¹

"Further information regarding the Red Indian, in the Museum at St. John's, Newfoundland.— Mr. Alexander Murray, in answer to my queries, says, in a letter, dated March 19th, 1875 : 'I have made a discovery regarding the Red Indian skull I have. It appears that Dr. Winter, of this place, took it and a thigh bone from the skeleton, which was found on the straight shore opposite the Indian Islands, in Sir Charles Hamilton's Sound. The skeleton, according to Dr. Winter, had been wrapped in birch bark, and buried in a sitting posture, and had various stone implements entombed, together with large crystals of iron pyrites to strike fire with when he woke up again. Dr. Winter further states, that the remains bore evidences of having been shot, some large seal- or swan-shot being found sticking in the bones, some of which and the skull were fractured.'"²

"During my first visit to Mr. John Peyton, in reply to the question, 'How did the Beothuks obtain fire?' he replied, that they ignited the down of the blue jay by sparks struck from two pieces of iron pyrites."³

"It appears that the Beothuks did not make any kind of pottery."⁴

Maj. J. W. Powell, writing of the language of this little-known people, says :

"Neither in amount nor quality is the material sufficient to permit final and satisfactory deductions, yet so far as it goes it shows that the language is quite distinct from any of the Algonquian dialects, and in fact from any other American tongue."⁵

I am aware that these quotations have but an indirect bearing upon the question of the origin of these graves, still they may serve as suggestions for future investigations.

¹ *Ibid.* p. 32.

² T. G. B. Lloyd. On the Beothuks of Newfoundland. *Journal of the Anthropological Institute Great Britain and Ireland*, Vol. V, No. II, pp. 226-227.

³ *Ibid.* p. 225.

⁴ *Ibid.* p. 229.

⁵ J. W. Powell. Indian Linguistic Families. *Annual Report of the Bureau of Ethnology*. Vol. VII, pp. 57, 58.

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